Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

October 10, 1960

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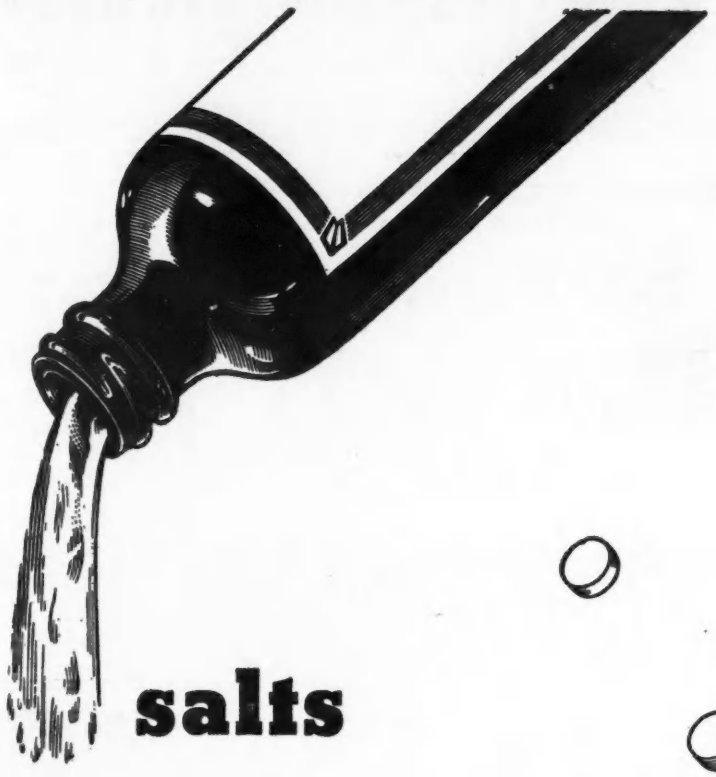

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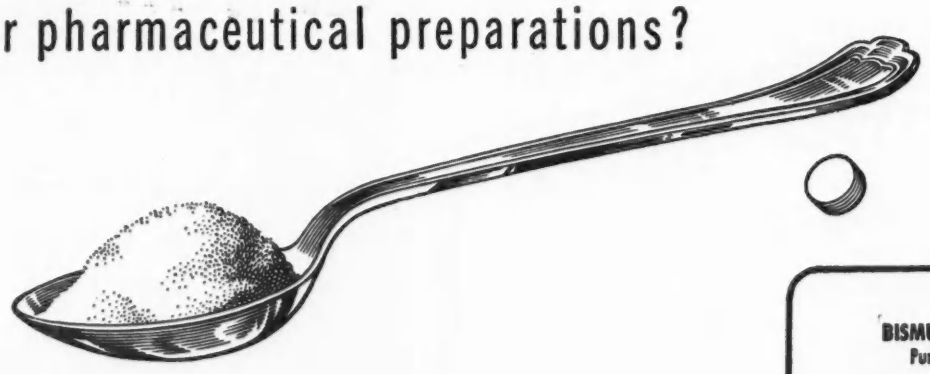

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J. T. Baker Chemical Co.
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Oil, Paint and Drug Reporter

Vol. 178 No. 16 30 Church St., New York 7, N. Y. October 10, 1960

ADVANCED: Richard V. Collingan, elected vice-president of Freeport Sulphur Company, New York. He is also president of Moa Bay Mining Company, a Freeport subsidiary whose facilities have been seized by the Cuban government.

Kodak, Despite Blast, To Build DMT Facility

Notwithstanding what it calls the worst disaster in its forty-year history —an explosion and fire last week at the aniline unit of its organic chemicals division in Kingsport, Tenn.— Tennessee Eastman Company is plunging ahead with the second phase of its "Kodel" fiber construction program.

Now coming off its drafting boards, says this Eastman Kodak Company division, are plans for two new installations at Kingsport: one for the manufacture of terephthalic acid and the other for dimethyl terephthalate. Completion date: the latter part of 1961.

The terephthalic and DMT facilities, reports Eastman, will be of sufficient size to meet its "Kodel" manufacturing requirements for these two chemicals.

Eastman's main "Kodel" polyester fiber plant, now in the final stage of construction, will have a production capacity of about 20 million pounds a year.

First units of the "Kodel" plant will be in operation before the end of this year.

The new DMT installation will also have capacity available to supply Kodak Park Works with dimethyl terephthalate for the production of "Estar," a polyester resin film base.

The explosion which rocked the Kingsport chemical complex occurred at 4:45 p.m. last Tuesday (October 4). It was followed by several smaller blasts and a fire. The blaze took about three hours to put out.

Toll of the disaster: eleven dead, two missing and presumed dead and about sixty injured.

The explosion, whose cause was still undetermined as OPD went to press on Friday afternoon (October 7), was centered in the aniline unit and did consid-

—Continued on page 61

Solvay to Expand Lab, Increase Research Effort

Allied Chemical Corporation's Solvay Process Division will begin work immediately on a major expansion which will nearly double facilities at its Syracuse, N.Y., research-technical service laboratories. Completion is scheduled for late next year.

Special laboratories being enlarged include those for studies in corrosion, pulp and paper, and plastics. Also enlarged

—Continued on page 54

Chemical Trade Happily Losing Some of Its Old-Time Popularity In Supreme Court These Days

To the chemical industry, the docket of the US Supreme Court for the new business term opening today (October 10) presents a paradox. When measured by the number of cases slated to come before the nine justices for the October term, the docket is one of the largest ever compiled by the court. But, from the standpoint of concern to the chemical industry, it happily contains fewer cases of prime interest than at any time in recent years. A search of the titles of the 900-odd cases thus far filed on appeal fails to uncover a single case involving a test of food, drug and cosmetic law enforcement.

A few cases are pending appealing from the law enforcement activities of the Federal Trade Commission, but none involving any issues of major importance to industry generally.

A Miscellaneous Docket

Mainly, the docket is made up of litigation between individuals, and actions against individuals growing out of police activities, with the usual dozen or more labor cases of varied importance, tax cases and personal injuries. Interest of the chemical industry will be found centered in these three cases—only two of which are actually before the court at this time:

- DuPont-General Motors antitrust case appealed by the government because of dissatisfaction with the ruling of Judge Walter LaBuy of the Chicago Federal District Court.
- FTC suit to obtain certain industry data filed with the Bureau of Census.
- Appeal by the government in the so-called bicycle tariff case.

The government's appeal in the duPont-GM case is but another chapter in the long drawn-out issue of trying to satisfy the Justice Department over the best way to eliminate so-called duPont influence in the affairs of General Motors Corporation because of stock ownership. But the case that packs the hidden wallop is the FTC case.

This case grows out of the FTC's investigation of the food processing industry. To make it easier for the commission

—Continued on page 55

British Hydrocarbon Unit Is Being Readied in Wales

British Hydrocarbon Chemicals, Ltd., is developing plans for a major expansion of its petrochemical activities into South Wales.

Cost of the venture may run as high as $28 million, says the company, a jointly-owned subsidiary of British Petroleum Company and Distillers Company, Ltd.

A proposed site of several hundred acres lies within a short distance of the British Petroleum refinery at Llandarcy, near Swansea.

The pattern of operations will follow that of British Hydrocarbon's petrochemical complex at Grangemouth, Scotland, where feedstocks from a nearby refinery are cracked for a variety of chemicals.

Started ten years ago, the Scotch operation has since been increased five-fold. Further expansion is under way, the company reports.

ADVANCED: Richard N. Williams, appointed director of administration for the Squibb Division of Olin Mathieson Chemical Corporation, New York. He had been with the company's energy division.

Monsanto Plastics Bid: A New Styrene Family

Monsanto Chemical Company will be on the market in late 1961 with a new family of styrene-based plastic materials out of its Addyston, Ohio, styrene facilities. A multi-million expansion for the purpose has just been started at Addyston, says Monsanto.

Meanwhile, an interim scale plant at the plastic division's Springfield, Mass., headquarters will begin producing the materials before the end of this year.

Until that time details on properties, price and performance are being withheld by Monsanto.

This much the company discloses: With start-up of the expanded facilities, Mon-

—Continued on page 44

National Distillers, IMC Set Fertilizer Acquisitions

In separate moves, two major suppliers of fertilizer raw materials each contracted to buy a fertilizer distributing company last week.

National Distillers & Chemical Corporation made arrangements for acquisition of the operating assets of Minnesota Liquid Fertilizer Company, of Minneapolis. The latter distributes anhydrous ammonia for direct application to the soil through

—Continued on page 54

FDA Can Relax; Probers Find Only Procedural Flaws

Officials of the Food & Drug Administration are feeling much happier and breathing a lot easier these days. After three months of probing around in its files to see what makes the agency tick, a group of leading scientists can't find anything so radically wrong that cannot be corrected with a few minor procedural repairs.

What major shortcomings are found to exist are in the law itself and the scientists recommend that congress move promptly to remedy it.

FDA's comparatively clean bill of health comes from the so-called Bronk committee, a group of eight nationally recognized scientists in the medical field appointed by Dr. Detlev Bronk, president of the National Academy of Sciences, at the request of Secretary of Health, Education & Welfare Arthur S. Flemming as an aftermath of charges made before the Kefauver drug investigating committee.

FDA Not Out of Woods Yet

FDA is not completely out of the woods yet, however. Another group is still looking into the matter of the drug industry's influence on the agency's personnel.

A former employee of FDA has accused agency officials of having been "brainwashed" by the industry. This investigating group, the so-called Kendall committee, will report later this month.

The Bronk committee makes eleven specific recommendations for changes in the laws and procedures of the FDA as the result of examinations it made into operations of the FDA's division of antibiotics, while it was under the direction of Dr. Henry Welch, and the New Drug Branch. It comes up with this general conclusion:

"Taking into account the limitations of the FDA's authority, funds and scientific personnel, the committee found the decisions it reviewed acceptable, despite certain deficiencies in the quality and quantity of the data upon which they were based.

"It found no evidence of disregard for the public health and noted that appropriate action had been taken when hazards were established by subsequent clinical experience."

Secretary Flemming feels that the committee's report is a "very definite vote of confidence" in the FDA's work, but he

—Continued on page 37

FDA Grants Extensions To Three Additive Groups

Effective date of the food additives law has been postponed for three more groups of additives until March 6, 1961, by the Food & Drug Administration. The idea is to give suppliers more time to submit scientific information clearing the additives for continued use.

One group of fifteen additives includes substances used as direct additives to food. The extension order limits the amount of such substances to be used and the purposes for which they are to be used. Another is a group of thirty-four indirect additives for which uses are specified. The third is a group of forty-one substances migrating from cotton fabrics used in dry food packaging. The latter includes a number of animal, vegetable and marine oils.

Carbon Black Operation To Debut on West Coast

Carbon black has never been manufactured on the Pacific Coast. For far west tire manufacturers this has meant dependency on shipments from plants in the southwest and deep south.

United Carbon Company, which reports these facts, has decided to remedy the situation. With $5 million in hand, the New York-based company will put up a 64-million-pound unit in Southern California. The company plans to be on stream some time in 1961. Site for the facility has not been disclosed.

The plant's output of furnace blacks will be marketed to tire manufacturers and retreaders along the Pacific Coast.

Candidates Told By Chemical Men to Start Talking

Chemical industry people want the two Presidential hopefuls to get down to brass tacks between now and November 8 and clarify their positions on some of the pressing questions which directly concern business.

With only about four weeks remaining for political speech-making before voters go to the polls to make their selections, there is a feeling among chemical executives that domestic issues affecting the business community are either being ignored or passed over too lightly by the candidates.

Business executives would like to hear more from each of the party standard bearers of the programs he might have in mind for government action in such fields as taxes, tariffs, labor relations, industry regulation, antitrust enforcement, etc.

In a few fields, such as farm relief and public health, there has been some attempt to spell out the programs in some detail, but in other areas, it is mostly conjecture based upon the platforms of the two political parties.

Both candidates, of course, have endorsed their respective party platforms, but the important thing to keep in mind, say observers, is the interpretations placed upon the platform planks by the candidates.

Chemical companies as such are taking no active part in the political battle, though conversation most always drifts to the subject of politics at most meetings, luncheons or other gatherings of chemical people.

The desire to hear more from the candidates on particular questions of a business nature is always apparent in the questions and speculative answers heard.

Although the companies are being care-

—Continued on page 45

OPD Reports From Europe

Euromart Works on Harmony Of Drug, Food Additives Laws

Harmonization of national laws and regulations covering drugs and food additives within the six-nation European Common Market is a tough job that officials are tackling gingerly with a keen appreciation of the political and economic complexities of the field. Officers of the Common Market secretariat in Brussels admit that continuation of some present national rules and laws in the drug and food fields could have the effect of cancelling out the supposed advantages of the disappearance of trade barriers between nations. There is a general understanding that unless care is taken import quotas and special industry protection devices may end up masquerading as "public health considerations."

Success or failure in this effort at harmonization will have significant meaning for US chemical and drug firms setting up in one Common Market country with the intent of tapping the whole 170 million population market.

The Difficulties That Lie Ahead

The difficulties range from such general and politically touchy problems as Italy's lack of drug patents to differing national test and certification requirements for food additives or food packaging materials.

German chemical and drug companies are particularly unhappy about the prospect of the Common Market opening all of Europe to the Italian firms which regularly copy drugs discovered elsewhere without licenses or agreements from the originating firm. American drug companies already have to deal with this problem in such export markets as the Middle East, Latin America, Asia and Africa.

In the food additive and packaging fields, the recent skin irritation in Holland alleged to have been caused by an emulsifying "anti-sputter" additive in a Unilever margarine—after full testing procedure and approval by Dutch authorities—has turned considerable attention to the varying rules on checking chemical products used in or with food ("OPD Reports from Europe," 9/26/60).

In Frankfurt, for instance, the Battelle Institute, affiliated with the Battelle

—Continued on page 61

Reichhold's Register Ajingling in August

Reichhold Chemicals, Inc., whacked out some $9 million in sales during the month of August, traditionally a slow one for chemical makers, but the briskest in Reichhold's history.

What's more, the White Plains, N. Y., company's net income for the first eight months of the year totaled 17.2 percent ahead of comparable '59 period, and its sales were 5.6 percent higher.

Net income reached $2,343,000, as against $1,999,000 in the '59 period, while sales were $65,759,000 as against $62,301,000.

Cal. Standard Is Ready To Grow in Chemicals

Standard Oil Company of California is laying the groundwork for a further expansion into chemicals. As first step in the program, the company has just consolidated all of its chemical interests under one subsidiary, California Chemical Company.

Making its first official move, California Chemical said that it will embark on a joint venture with British Petroleum Company calling for immediate construction of two aromatics manufacturing plants in Europe. Cost of the project: $19.6 million.

The joint undertaking will be known as BP California, and British Petroleum will operate the unit on its behalf. The plant will be located adjacent to existing BP re-

—Continued on page 43

FTC's Ruling Restrains Big Vitamin Producer

Federal Trade Commission has ordered Mytinger & Casselberry, Inc., Long Beach, Calif.—reportedly the nation's largest direct seller of vitamin and mineral food supplements—to discontinue "making unlawful exclusive dealing agreements" with distributors of its "Nutrilite Food Supplement."

The FTC order, accompanied by an

—Continued on page 64

Chemical Export Effort To Get Spur From Gov't

An all-out crash program to expand exports of chemicals from the United States—now running around $1.7 billion—is under way by the Departments of State and Commerce. These are some of the things in the works:

- Plans have been drawn up for greatly increasing the force of consular officers stationed abroad to assist American businessmen in making foreign business contacts.
- An intensive training program is being put into operation by both departments for government personnel in promoting US private trade.
- The Department of Commerce is conducting a one-time spot check on market

—Continued on page 54

The Week's Price Changes

Bromoform, Magnesium Bromide, Strontium Bromide Advanced. Coconut Oil, Oleic Acid, Palm Acid, Vanilla Beans Reduced.

Prices Advanced

Bromoform, 50c per lb. (p. 58).
Copra, $32.50 per ton (p. 66).
Corn oil, crude, ½c. per lb. (p. 66).
Refd., ⅝c. per lb. (p. 66).
Cottonseed oil, crude, ¼c. per lb. (p.66).
Refd., ¼c. per lb. (p. 66)
Lard, cash, 2/5c. per lb. (p. 66).
Magnesium bromide, 20c. per lb. (p. 58).
Olive oil, spot, 10c. per gal. (p. 66).
Peppermint oil, natural, 15c. per gal. (p. 62).
Redistilled, 40c. per lb. (p. 62).
Sandalwood oil, 50c. per lb. (p. 62).
Soybean oil, crude, ½c. per lb. (p. 66).
Refd., ⅛c. per lb. (p. 66).
Spearmint oil, 75c. per lb. (p. 62).
Strontium bromide, 16c. per lb. (p. 58).
Trichloroacetic acid, USP, 10c. per lb.

Prices Reduced

Cocoa butter, 1c. per lb. (p. 66).
Coconut oil, fatty acid, 1½c. per lb. (p. 66).
Coconut fatty acid, 1½c. per lb. (p. 66).
Corn oil foots, ¼c. per lb. (p. 66).
Cottonseed fatty acd, 1c per lb. (p. 66).
Oleic acid, ¼c. per lb. (p. 66).
White, ½c. per lb. (p. 66).
Palm acid, 1c. per lb. (p. 66).
Soybean fatty acid, 1c. per lb. (p. 66).
foots, ½c. per lb. (p. 66)
Stearic acid, ½c. per lb. (p. 66).
Tallow, fatty acid, 1½c. per lb. (p 66).
Tin metal, Straits, 1c. per lb. (p. 43).
Vanilla beans, Bourbon, 50c. per lb. (p. 62).
Mexican cuts, 50c. per lb (p. 62).
whole, 50c per lb. (p. 62).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER's relative record of prices of chemicals and related materials is currently as follows:

(100—1949 average)

Oct. 7, 1960	Sept. 30, 1960	Oct. 9, 1959
109.65	109.65	110.81

Business Definitely Spotty: P.A.'s

This report was prepared by the business survey committee of the National Association of Purchasing Agents.

To date, the fall pickup has not shown the vigor that most had hoped for. The business situation is definitely spotty, with some companies and industries doing very well, while others are depressed. And, there is increasing evidence that even some of those who currently are prospering are apprehensive about the duration of their prosperity. Our production and new order statistics show little change from last month. Here's the way the figures look:

	Better	Same	Worse
New Orders			
September	29	53	18
August	35	42	23
Production			
September	23	60	17
August	26	49	25

As reported, jobs are hard to find; and, more of our members report reductions in employment than tell of adding people to their payrolls.

Prices are steady; but, in many instances, this means that keen competition is resulting in sales at substantially below so-called "book" or "list" figures. Quality has taken on new importance and many companies are attempting to bolster their sales by giving increased emphasis to the production of a trouble-free superior product.

Caution is again emphasized in the buying policy being followed by most purchasing executives. Each month this year they have shortened their position, tending more and more toward a hand-to-mouth buying policy.

Because inventory policies have such

—Continued on page 73

IN RESEARCH POST: Dr. Frank H. Healey, promoted to research and development director by Lever Brothers Company, New York.

Pfizer Cuts Itaconic Acid

Chas. Pfizer & Co. has posted price reductions ranging from 7 to 27 percent for itaconic acid and esters. The carload price on technical acid was lowered from 38½ cents to 34½ cents. Carload prices on dimethyl itaconate and dibutyl itaconate were cut sharply, both from 54 cents to 39½ cents a pound.

Ohio Oil Increases Holdings

Ohio Oil Company, Findlay, Ohio, has assumed ownership of all Kinney-Coastal Oil Company properties for $1,629,000 cash, plus an oil and gas production payment of $7.3 million. The latter payment is expected to cover a period of about seven years.

Index to News and Market Reports

Association News

ACC&CE Names Panelists..... 45
Business Spotty, Say P.A.'s..... 4
CMRA of So. Calif. to Meet..... 73
SAACI Plans Sales Clinic..... 7
SCI Award to Hans Stauffer..... 7

Government News

Chemical Exports to Get Gov't Spur.... 4
Chemical Firms Get Missile Contracts.. 5
Chemical Men Less Popular at Court.... 3
Cyanamid Sets Melamine Defense..... 5
DDT Buying Begins..... 5
FDA Grants Time Extensions..... 3
FDA Probed; Few Flaws Found..... 3
FTC Rules Against Vitamin Maker..... 4
Lead, Zinc Probe Held Unwarranted.... 7
Propylene Glycol Alginate Cleared..... 55

Industry News

Allied Plastics Unit Consolidates..... 7
Cabot Takes New Name..... 5
Cal. Standard to Grow in Chemicals.... 4
Candidates Asked for Business Views.... 3
Carbon Black Unit Slated..... 3
Caustic Soda: Per Capita Consumption.. 47
Chas. Pfizer Dedicates Research Unit.... 7
Chlor-Alkalies Market Survey..... 7
Chlor-Alkalies: Consumption by Decades 47
Chlor-Alkalies: Per Capita Consumption. 47
Chlor-Alkalies: Use Pattern Charted.... 46
Chlorine: Per Capita Consumption..... 47
2,5-Diphenyloxazole Cut..... 37
Federal Color Expands..... 5
F. P. Jay Chemicals Is New Name..... 44
Ion Exchange Unit Bought..... 7
Kodak to Build DMT Unit..... 3
Monsanto Plans New Styrene Family... 3
National Distillers, IMC Buy Firms..... 3
Ohio Oil Increases Holdings..... 4
Petroleum Naphthalene Tally Raised..... 5
Pfizer Cuts Itaconic Acid Prices..... 4
Plastics Chief Expects Big Turnout..... 45
Reichhold Reports Sales Rise..... 4
Soda Ash: Per Capita Consumption..... 46
Solvay to Expand Lab..... 3
Sulfur Dioxide Capacity Going Up..... 5
S-W Develops New Pigment..... 73
Vick Prexy Tells Expansion Moves..... 44

International News

British Hydrocarbon Expanding..... 3
Euromat Seeks Uniform Additives Laws.. 4
Houdry, German Firm Team Up..... 5
Pyrethrums Bloom Again in Congo..... 5
Scotch Firms Merge..... 55

Personnel News

Freeport Sulphur Elects Collingan..... 3
GAF Appoints Two V.P.'s..... 5
Jobs & People..... 54
Lever Brothers Promotes Healey..... 4
Merck Unit Names Klodt..... 5
Nopco's Wechsler Retiring..... 5
Organon Advances McGovern..... 7
Shawinigan Ltd. Names W. H. Mueller.. 44
Squibb Appoints Williams..... 3

Market Reports

Acids..... 42
Agricultural Chemicals..... 48
Aliphatic Organics..... 50
Aromatic Chemicals..... 62
Bleaching Agents..... 49
Botanical Drugs, Gums..... 59
Chemical Specialties..... 49
Coal Chemicals..... 52
Coatings Materials..... 65
Delustrants..... 49
Drugs..... 58
Essential Oils..... 62
Fats & Greases..... 67
Fertilizer Materials..... 48
Fine Chemicals..... 58
Heavy Chemicals..... 42
Industrial Organic Chemicals..... 50
Metals, Nonferrous..... 33
Naval Stores..... 66
Oil Cake and Meal..... 68
Oils..... 66
Paint Materials..... 65
Pesticides..... 48
Petrochemicals..... 50
Petroleum Derivatives..... 57
Protective Coatings Materials..... 65
Spices..... 64
Trade Name Chemicals..... 49
Waxes..... 68

General Features

Advertisers' Index..... 73
Association Meeting Dates..... 7
Bids Wanted..... 72
Classified Advertisements..... 72
Coal Chemical Output..... 52
Crude Oil Stocks..... 57
Current Market Quotations..... 9
Editorials..... 40
Imports..... 56
Jobs & People..... 54
Obituaries..... 72
OPD Price Index..... 4
OPD Reports from Europe..... 4
Washington Talks It Over..... 40

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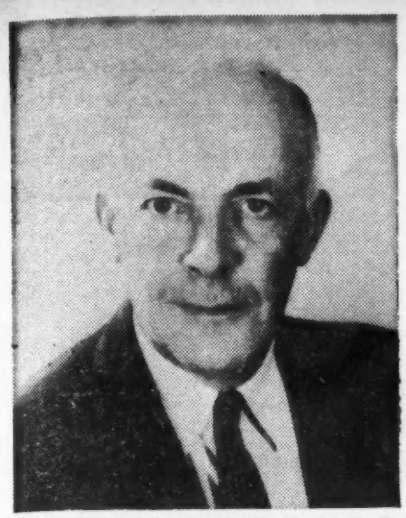


TWO NEW VICE-PRESIDENTS: Harold G. Shelton (left) and Edward J. Williams, elected to vice-presidencies by the board of directors of General Aniline & Film Corporation, New York. Mr. Shelton was recently appointed group executive in charge of the chemical, dyestuff and pigment operations of the company. In his new position, Mr. Williams will be concerned with corporate financial planning and control.

Cyanamid Sets Melamine Defense; $87 Million Sales Item in the Balance

American Cyanamid Company is busy putting together a vigorous defense against Department of Justice charges that it has conspired with six other firms to monopolize the melamine and melamine products business. At stake, according to industry estimates, is a sizable piece of the $87 million in sales reportedly representing Cyanamid's interest in this field. The figure amounts to about 15 percent of the company's total volume.

HONORED: Ralph Wechsler, chairman of the board of Nopco Chemical Company, Newark, N.J., feted by company employees at a dinner marking his retirement from the company after almost forty years of service.

In a civil antitrust suit filed in New York last week, the department demanded that Cyanamid be required to divest itself of Formica Company and the Panelyte Division of St. Regis Paper Company, both of which manufacture consumer products from melamine.

Free Sale Asked

The complaint also asked that Cyanamid "be prohibited from refusing to sell either the raw material or melamine and products containing melamine to any buyer willing to purchase the same at reasonable prices."

Named as co-conspirators but not co-defendants with Cyanamid were Monsanto Chemical Company, St. Louis, Mo.; Ciba Products Corporation, Fairlawn, N. J.; Ciba, Ltd., Basle, Switzerland; British Industrial Plastics, Ltd., London; Societe des Products Azotes, Paris and British Oxygen Company, Ltd., London.

The complaint alleges that, beginning in 1937, Cyanamid has monopolized melamine and all products made from melamine resins through an illegal agreement made with the six other companies to exploit a competitive advantage accruing from a Cyanamid patent license on melamine, and from its exclusive control of dicyandiamide, the raw material for melamine.

According to the complaint, Cyanamid has adjusted price differentials between melamine and its basic raw material to discourage melamine manufacturers and

—*Continued on page 37*

DDT Buying Begins; Goal: 60 Million Lbs.

First purchases of DDT for the 1960-61 antimalaria campaign were made last week by General Services Administration, totaling 11,124,800 pounds at prices ranging from a low of 21 cents to a high of 23.39 cents a pound.

The full amount to be bought for the new campaign year is yet to be computed by the International Cooperation Administration, but may be announced shortly. Advance indications are that it will total approximately the same as last year or in excess of 60 million pounds.

The purchases made last week are for

—*Continued on page 64*

Chemical Companies Snag Five Big Missiles Contracts

Award of five sizable contracts to companies in the chemical industry for materials and work in the rockets and propellants field were announced last week by the Department of Defense.

Hercules Powder Company, Wilmington, Del., received two supplemental contracts totaling $16,217,452 from the

—*Continued on page 60*

Pyrethrum Industry in Congo Is Back in Bloom Once More—Thanks to an American's Help

Pyrethrum processing, brought to a dead halt by the political confusion in the Congo, is now in full swing again. The good news for insecticide formulators comes by way of Wallace Chavkin, an expert on the insecticide-producing flower, who has just returned from a three-week tour of strife-torn East Africa. There, with the assistance of a UN supervisory team, his efforts produced treaties between the Congo and Ruanda Urandi, which enabled the industry to get back in business.

Mr. Chavkin is president of Biddle Sawyer Corporation, New York, the exclusive sales representative for pyrethrum planters in the Kivu province of the Congo and Ruanda Urandi.

Quick Intervention

Mr. Chavkin's intervention had been hurriedly arranged in a deteriorating situation. The area's single pyrethrum processing plant is located in the Congo, and Kenya planters, dependent on the plant, had become reluctant to ship to it as tension mounted in Leopoldville.

Fears were expressed that the Congo government might seize the flowers entering its territory, or prevent the return of the extract.

Conferring first with officials of the major Congolese banks, Mr. Chavkin asked that they guarantee to Kenya and Ruanda Urandi planters the value of the extract or flowers delivered to the factory, if the finished extract was not returned to the planters within a stated period.

These terms were agreed to, providing the governments of Ruanda Urandi and the Congo would issue appropriate decrees.

Most crucial of the meetings to follow was held with Moise Tshombe, head of Katanga province. He agreed to issue a decree permitting the unhindered transit of flowers from Kenya and Ruanda Urandi into the Congo, and the return of the extract to the producers. This transit would be free of import duties, import taxes or other government levies, with the exception of small levies already collected by the cooperatives.

After successful completion of similar negotiations with Ruanda Urandi, planters in all three areas were informed of the new program and quickly responded to a call to resume production and shipments.

His mission accomplished, Mr. Chavkin returned to the US with the following

—*Continued on page 44*

HEAD OF NEW REGION: Gordon R. Klodt, put in charge of a new sales region for Merck Sharp & Dohme, West Point, Pa. He will be responsible for sales in the districts centered around Chicago; Columbus, Ohio; Boston; New York, and Philadelphia.

Cabot at Seventy-Eight Gives Itself a New Name

Cabot Corporation is the new streamlined name of seventy-eight-year old Godfrey L. Cabot, Inc., of Boston.

The company has just adopted the new name and consolidated its three subsidiaries — Cabot Carbon Company, Cabot Shops, Inc., and Cabot Gasoline Corporation.

The company, one of the oldest carbon black producers in the world, is reportedly the world's largest today. It also turns out natural gas, liquefied petroleum gases, natural gasoline, crude oil, pine tars, charcoal, silicon dioxide and wollastonite. Subsidiary companies produce carbon black in Canada, England, France and Italy.

The Cabot organization began operation in 1882 under its present chairman of the board, Dr. Godfrey L. Cabot. In 1922 it incorporated under the name Godfrey L. Cabot, Inc.

Petrocarb, Inc., a subsidiary engineering firm, specializes in a high tempera-

—*Continued on page 55*

Sulfur Dioxide Makers Race to Beat Squeeze

Moving fast to ease the supply squeeze on liquid sulfur dioxide, Virginia Smelting Company has just brought on stream a substantial but undisclosed capacity boost at its West Norfolk, Va., facilities.

Stauffer Chemical Company is wasting no time either in making its debut into this business. The New York company last week began construction of a new facility at Baton Rouge, La., and plans to have it on stream before year's end. The unit, operated by Stauffer's Consolidated Chemical Industries Division, will have a rated capacity of 10,000 tons of SO_2 yearly.

At West Norfolk, Virginia Smelting's new unit—its second—is using what is described as a unique new process design, engineered by the company's own staff.

—*Continued on page 72*

Color Plant Starts Up

Federal Color, Inc., has started full-scale operations at a new dry color pigments plant in Cincinnati, Ohio. The new building, containing 60,000 square feet of floor space, is part of a $1 million expansion program of Federal Color. The plant is turning out both dry and flushed pigments for the paint, printing ink, rubber, plastic and paper industries.

Houdry, German Firm Teaming in Catalysts

Houdry Process Corporation has joined forces with Chemische Werke Huels, of Marl, West Germany, to form a jointly-owned company in the field of catalysts.

The new firm, Katalysatorenwerke Houdry-Huels Gmbh, will produce and market patented catalysts of the two parent companies. It will be headquartered in Marl.

Chemische Werke Huels, with 1959 sales of $150 million, is reportedly the fourth largest chemical concern in Germany. The firm is a licensee of Houdry's dehydrogenation process and produces the 3-D platinum reforming catalyst under a Houdry license.

Petroleum Naphthalene Tally Now 325 Million Pounds

Ring up another 50 million pounds of capacity for the still-aborning US petroleum naphthalene industry.

The latest tally shows that American producers will be geared to turn out some 325 million pounds of petroleum naphthalene by the end of next year.

Nearly half this nationwide total will stem from the combined efforts of Tidewater Oil Company and Collier Carbon & Chemical Corporation.

Last week this team disclosed that it intends to add capacity at the combine's planned Delaware City, Del., installation.

The jointly-owned facility—to be located at Tidewater's Delaware refinery—will now have an annual capacity of 100 million pounds of petroleum naphthalene, instead of the 50 million pounds originally contemplated.

A second Tidewater-Collier naphthalene plant—this one to be pegged at 50 million pounds a year—is also being considered for the west coast. To be located at Collier's Los Angeles facilities, its projected on-stream date is late '61.

Sun Oil Company and Ashland Oil & Refining Company will account for the remaining petroleum naphthalene capacity.

Sun will spend some $8 million to put up a 100-million-pound naphthalene plant at its Toledo, Ohio, refinery.

Ashland is already under way on construction of a 75-million-pound installation at Catlettsburg, Ky.

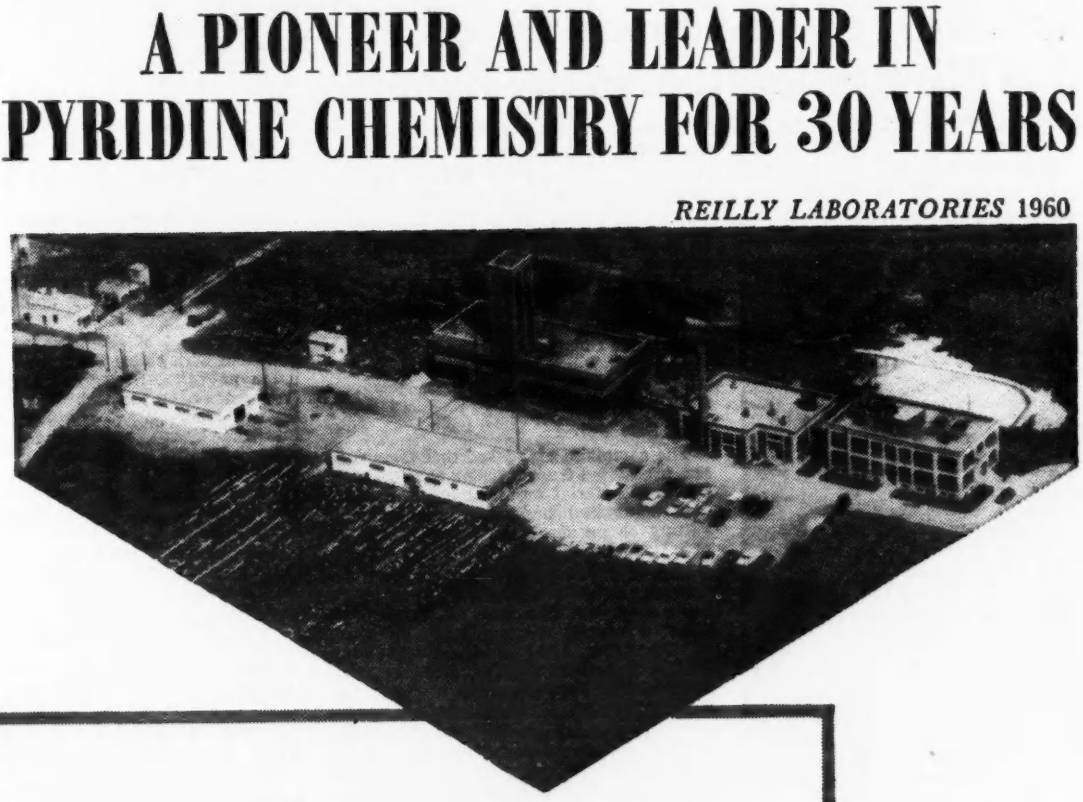
Meanwhile, cokeoven naphthalene—the only material off the market at present —remains in very tight supply. What's more, producers say that the situation is likely to get worse before it gets any better.

Imports of naphthalene are off and, the trade feels, this state of affairs is likely to deteriorate as European phthalic anhydride makers continue to step up their capacity.

REILLY LABORATORIES 1930

A PIONEER AND LEADER IN PYRIDINE CHEMISTRY FOR 30 YEARS

REILLY LABORATORIES 1960

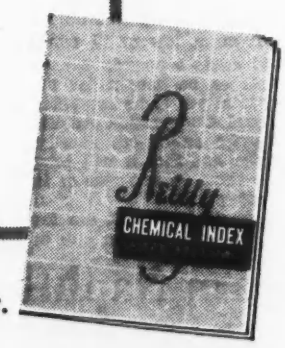


The Reilly Laboratories have synthesized and commercialized Pyridine, 2-Picoline, 3-Picoline, 4-Picoline and many Pyridine derivatives.

3-Pyridyl Carbinol

and 3-Picolylamine

are our newest compounds.



Send for the Reilly Chemical Index.

Reilly CHEMICALS

REILLY TAR & CHEMICAL CORPORATION
MERCHANTS BANK BUILDING, INDIANAPOLIS 4, INDIANA

Sales Offices in Principal Cities

IN MARKETING POSITION: Thomas R. McGovern, jr., appointed director of marketing services for Organon, Inc., West Orange, N.J.

Allied Plastics Unit Gets Major Overhaul

Allied Chemical Corporation is further consolidating its plastics and resins interests, combining polyethylene manufacturing and marketing with other plastics in a realigned plastics division.

Along with the move, the division has also made some major personnel changes, headed by the appointment of Roy L. Cammann as senior vice-president.

Named with Mr. Cammann are Bennett D. Buckles, who is to be vice-president in charge of sales; James M. Maddox, vice-president for operations, and Damon A. Peterson, who will serve as technical vice-president.

In 1958 Allied separated its plastics and coal chemicals business from its building and paving material operations. Since that time the plastics and coal chemicals division has handled coaltar and petroleum chemicals, industrial pitches, solvents, plasticizers and alkyd, nylon, phenolic, polyesters, melamine and urea plastics.

To this line will now be added Allied's unique form of polyethylene, first introduced in 1954. Production at the Tonawanda, N. Y., petrochemical division plant was increased in 1958 and last year. Construction of new plants to manufacture a broad range of polyethylenes at Orange, Tex., commenced earlier this year.

Ion Exchange Installation Bought by Mich. Chemical

Michigan Chemical Corporation, St. Louis, Mich., has acquired from the Atomic Energy Commission the government's large, rare-earth ion-exchange facility, which is located within Michigan Chemical's plant area.

This unit, originally built by Michigan Chemical for the production of the rare earth oxides, particularly yttrium oxide, for the Atomic Energy Commission, is be-

—*Continued on page* 73

Chlor-Alkalies: An Analysis Of Their Present-Day Markets And Indicated Future Trends

Have you had your 2.70 ounces of soda ash, 2.19 ounces of caustic soda and 2.11 ounces of chlorine today? If not, you will probably make up tomorrow for what you did not use today. These quantities are the actual average daily consumption for each man, woman and child in the USA. In amounts they sound very insignificant and, of course, are not consumed literally by individuals. But in all the things we use from day to day, these chemicals are among the most important raw materials in the manufacture of the myriad items that make up the high standard of living we enjoy in 1960.

This article on chlor-alkalies was especially prepared for OPD by H. W. Gleichert, vice-president of market research and development for Columbia-Southern Chemical Corporation, subsidiary of Pittsburgh Plate Glass Company, Pittsburgh, Pa.

These 7.00 ounces of chlor-alkalies per capita daily consumption, multiplied by a population close to 180 million, do add up to some very large numbers. In 1959 the tonnages were:

	Production	Domestic Consumption	Consumption in Pounds Per Capita
Soda Ash.....	5,611,617	5,459,387	61.65
Caustic Soda..	4,674,946	4,429,589	50.02
Chlorine	4,284,583	4,271,545	48.24

Except for sulfuric acid, the chlor-alkalies are the largest tonnage basic chemicals essential for our modern way of living.

Soda Ash, the Oldest Alkali

Soda ash (sodium carbonate) is probably the oldest member of the alkali family. In olden times it was secured, along with some potash content, from leaching wood ashes, and from this it derived its name.

By treatment with lime (calcium hydrate), soda ash produces caustic soda (sodium hydroxide), and for many years this was the method employed in its manufacture. With the development of the electrolytic cell, caustic soda was produced as a co-product of chlorine from salt brine.

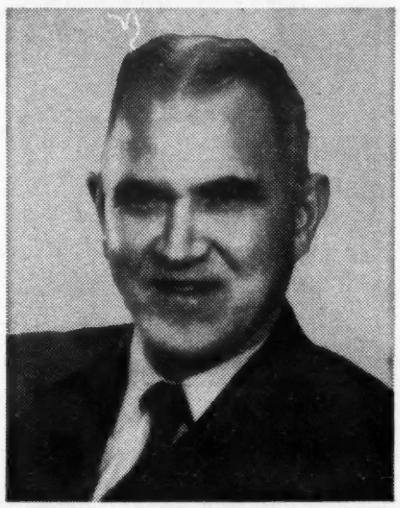
Tremendous impetus was given to chemical research and development efforts during the First World War. With the increasing availability of liquid chlorine as a versatile raw material at an economic price during the 1920's, its rapid growth has changed the old-time chlor-alkali picture tremendously. Each succeeding decade since then has pyramided its use to its present position.

The growth in chlorine has had a vast effect on the two alkalies—soda ash and caustic soda. Soda ash is produced by four different processes:

- The well-known ammonia soda (or Solvay) process.
- Recovery from natural soda lakes such as those in California.
- The deposits of trona laid down eons ago deep in the Green River area of Wyoming.
- By carbonation of cell liquor from electrolytic chlorine cells.

To serve the growth in the use of caustic soda, present-day capacity of soda ash would have to be more than doubled to

—*Continued on page* 46



MEDALIST: Hans Stauffer, president of Stauffer Chemical Company, New York, named to receive the chemical industry medal of the Society of Chemical Industry in New York on October 21.

SACCI Will Study Sales Chart Therapy

Expert clinicians in the field of chemical sales therapy have just completed plans for the annual sales clinic of the Salesmen's Association of the American Chemical Industry.

The session, slated for November 14 at New York's Roosevelt hotel, will be devoted to improved communications between company headquarters and the man in the field.

The theme is "How the Company Can Better Cooperate with the Field Salesman."

Three groups of panelists will discuss:

- What makes a top flight salesman.
- A more effective relationship between the salesman and product manage-

—*Continued on page* 73

Lead, Zinc Probe On Imports Held Unwarranted Now

The Tariff Commission sees nothing new in the lead and zinc situation in this country. At least not new enough to warrant reopening an investigation of the industry for the purpose of withdrawing the import quota arrangement now in effect and restoring the concessions granted to foreign suppliers under the trade agreements program.

President Eisenhower has been given these conclusions of the commission in a report summarizing the first review of the lead and zinc import quota of October 1958.

Prices Have Firmed Up

The commission finds that although production is running at levels close to all-time lows and employment has dropped sharply in the industry, prices have firmed up somewhat in the past two years. Nor does the commission see any significance in the rise that took place in imports of manufactured lead and zinc products.

US mine output of lead declined from 338,000 tons in 1957, to 267,000 tons in 1959—the first full year following imposition of import quotas. Production in 1959 was the lowest on record since 1899, the commission said. Output for the first half of 1960 amounted to 132,000 tons, or 3 percent more than in the corresponding period of 1959.

Zinc production declined from 532,000 tons in 1957 to 412,000 tons in 1958, but increased to 425,000 tons in 1959. The production in 1959 was 3 percent higher than that in 1958, but production in both of these years was lower than in any earlier year since the Great Depression of the early 1930's. In the first half of this year, zinc production was 239,000

—*Continued on page* 68

Chas. Pfizer Dedicates Medical Research Center

Chas. Pfizer & Co., with a spanking new headquarters building rising on New York's Second Avenue, is all set to go with the newest and largest scientific research center in its far-flung drug empire.

The still Brooklyn-based company last week dedicated a new 177,000-square-foot medical research laboratories at Groton, Conn., in ceremonies attended by some 1,000 drug executives, government notables and physicians.

Microbiological, chemical and biochemical research units—formerly housed chiefly in the company's Brooklyn laboratories—have been consolidated in Groton on a nineteen-acre site overlooking the Thames River.

The new laboratories, says a Pfizer spokesman, will make possible a fully-integrated research program against a variety of medical problems, including heart and blood ailments, mental illness, infectious diseases and metabolic disorders.

Pfizer's research effort is also backed by cancer and bacteriological research

—*Continued on page* 55

Association Meetings

American Coke & Coal Chemicals Institute, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., October 17-18.

American Council of Independent Laboratories, annual meeting, Deauville hotel, Miami Beach, Fla., October 11-15.

American Mining Congress, convention and exposition, Convention Center, Las Vegas, Nev., October 10-13.

American Oil Chemists' Society, fall meeting, New Yorker hotel, New York, October 17-19.

Association of American Feed Control Officials, annual meeting, Shoreham hotel, Washington, D. C., October 13-14.

Association of American Fertilizer Control Officials, annual meeting, Shoreham hotel, Washington, D. C., October 14.

Association of American Pesticide Control Officials, annual meeting, Shoreham hotel, Washington, D. C., October 15.

Association of Official Agricultural Chemists, annual meeting, Shoreham hotel, Washington, D. C., October 10-12.

Canadian Manufacturers of Chemical Specialties Association, annual meeting, Queen Elizabeth hotel, Montreal, Que., Canada, October 24-26.

Chemical Bureau Alumni Meeting, Lexington hotel, New York, October 20.

Chemical Buyers Group of National Association of Purchasing Agents, fall conference, Pick-Congress hotel, Chicago, October 27.

Chemical Market Research Association, Pittsburgh Hilton hotel, Pittsburgh, Pa., November 9-10.

Commercial Chemical Development Association, joint meeting with the chemical economics division of the Chemical Institute of Canada, Queen Elizabeth hotel, Montreal, Canada, October 18.

Dry Color Manufacturers' Association, monthly meeting, Shelburne hotel, New York, October 13.

Electrochemical Society, Shamrock hotel, Houston, Tex., October 9-13.

Federation of Societies for Paint Technology, annual meeting, Sherman hotel, Chicago, October 31-November 2.

Manufacturing Chemists Association, semi-annual meeting and midyear conference, Statler Hilton hotel, New York, November 22.

National Paint, Varnish & Lacquer Association, annual convention, Drake hotel, Chicago, October 27-29.

National Pest Control Association, annual convention, Tulsa, Okla., October 17-20.

Pharmaceutical Manufacturers Association, eastern regional meeting, Waldorf-Astoria hotel, New York, December 12-14.

Salesmen's Association of the American Chemical Industry, annual sales clinic, Roosevelt hotel, New York, November 14.

Society of Chemical Industry, American section, chemical industry medal award dinner, Waldorf-Astoria hotel, New York, October 21.

Society of the Plastics Industry, New England section conference, Wentworth - by-the - Sea, Portsmouth, N. H., October 13-14.

Synthetic Organic Chemical Manufacturers Association, all-day seminar on tariffs and customs, Delmonico hotel, New York, October 11.

Toilet Goods Association, scientific section's winter meeting, Waldorf-Astoria hotel, New York, November 30; annual convention, Waldorf-Astoria hotel, New York, May 9-11.

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MORTON LATEX RESEARCH . . . A comprehensive continuing research program in the laboratories of Morton Chemical Company brings you the best in Latex developments. Our understanding of polish formulating problems is your assurance of the latest techniques and developments in polymer polish ingredients.

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OUTSTANDING PERFORMANCE . . . Your goal . . . and ours . . . is to produce a polymer floor polish with the characteristics your customers want. *Morton's RWL Latices* permit you to formulate for high gloss, hardness, durability, leveling, or any other specific properties needed. Ultra-small particle size of less than 0.02 microns, and high stability of *Morton's RWL Latices* give you complete flexibility in developing your formulas.

Your Morton Man can give you complete details on *RWL Latices* and Morton's complete technical service. Your inquiry will receive immediate attention.

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Magnesium Oxide • Magnesium Carbonate
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Diazo Chemicals • Cuprous iodide
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CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, October 7 on large lots, f.o.b. New York, with the lowest in the left-hand column and the high-est in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil ens. ..... lb. 1.90 - 2.40
Acacia (see Arabic gum).
Acetaldehyde 99% dms., c.l., works. lb. .12 - —
dms., t.c.l., works ..... lb. .13½- —
tanks, works ..... lb. .10 - —
Acetaldol (see Aldol)
Acetanilide, tech., flaked, bbls., bgs., c.l., frt alld lb. .32½- —
bbls. bgs. ton lots, frt. alld. lb. .33½- —
bbls. bgs. smaller lots, frt. alld lb. .36½- —
USP bbls. 225-lb dms. any quantity lb. .79 - —
100-lb dms., any quantity lb. .81 - —
Acetic acid coml., or redist., 28%, bbls 100 lbs 4.80 - —
56%, bbls. ..... 100 lbs 8.25 - —
70%, bbls. ..... 100 lbs 9.95 - —
80% bbls. ..... 100 lbs.10.45 - —
Acetic acid glacial, syn., CP dms. dlvd 100 lbs.22.00 -23.00
tech., dms., c.l. dlvd .. 100 lbs.13.75 —
dms., t.c.l., dlvd ..... 100 lbs.15.25 - —
tanks, dlvd. ..... 100 lbs.10.00 —
USP, cbys., dlvd .... 100 lbs.31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .16½- —
aluminum ret dms., t.c.l., dlvd E. lb. .18 - —
tanks, dlvd E. ..... lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib dms., t.c.l., dlvd lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd lb. .82 - —
fib dms., t.c.l. dlvd ..... lb. .83 - —
Acetone, CP, dms., c.l., dlvd .. lb. .10½- —
dms., t.c.l., dlvd ..... lb. .12 - —
tanks, dlvd. ..... lb. .08 - —
Acetonitrile, dms., c.l., t.l., dlvd lb. .35 - —
dms., t.c.l. dlvd ..... lb. .36½- .37
tanks, dlvd ..... lb. .32 - —
Acetophenetidin, USP, 200-lb. dms., 1,000 lbs., frt. alld lb. 1.20 —
100-lb dms. 1,000 lbs., frt. alld. lb. 1.22 - —
Acetophenone, ens. dms ..... lb. .42 - 1.30
Tech., dms., c.l., works ..... lb. .47 - —
dms., t.c.l., works ..... lb. .47¾- —
tanks, works ..... lb. .45 - —
N-Acetyl-p-aminophenol, dms., t.l. (min 23,000 lbs.), frt. adjusted lb. 1.24 —
dms., 5,000-lb lots, same basis lb. 1.30 - 1.45
dms., smaller lots, same basis lb. 1.35 1.63
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .20 —
cs., t.c.l., ex whse ..... lb. .25½- .31
Acetylene tetrabromide, 16-dm. lots or more, f.o.b. works lb. .53 - —
Acetylsalicylic acid, USP, cryst. (20, 40 mesh), powd. (80 mesh), 250-lb. dms., c.l., pt. of shipt lb. .56¼- —
USP 10% starch granulation, 12-50 mesh, white, 250-lb. dms., c.l., same basis lb. .56¼- —
(Pink and green granulations 5c. per lb. higher.)
Freight equald. shipt. identical quantity over standard routes, from N.Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .35½- —
non-ret. dms., t.c.l., frt. alld. E. of Denver lb. .36½- —
tanks, frt. alld. E. of Denver. lb. .33 - —
non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., t.c.l., frt. alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver lb. .37 - —

ACIDS

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls. ..... lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .36 - —
dms., t.c.l., works ..... lb. .36¾ - —
tanks, works ..... lb. .31 - —
Acrylamide, dms., t.l., f.o.b. works. lb. .58 - —
dms., t.t.l., same basis ..... lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.l., dlvd. lb. .42½- —
dms., t.c.l., t.t.l., dlvd ..... lb. .43½- —
tanks, dlvd. ..... lb. .40 - —
tech., esterification, dms., t.l., frt. prepaid lb. .41½- —
tanks, same basis ..... lb. .39 - —
tech., polymerization, dms., t.l., f.o.b. shipping point lb. .42½- —
tanks, same basis ..... lb. .40 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .26 - —
dms., t.c.l., t.t.l., frt. alld ..... lb. .27 - —
tanks, frt. equald ..... lb. .23 - —

Abies Siberica Oil—Ammonium Bicarbonate

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd ..... lb .32¼- —
bgs., t.c.l., dlvd. ..... lb. .35 - —
Agar, USP Kobe No 1, strip, bls. lb. 2.75 - 3.00
powd., 30 mesh., fib. dms lb 2.40 - —
dl-Alanine, dms. 100-lbs or more, f.o.b works lb 5.25 - —
dms. 1-99 lbs., same basis .. lb.10.00 - —
Aldol, 95%, dms., t.c.l., works lb. .28 - —
Aldrin, tech., fib dms., c.l., t.l. dlvd lb. .99 - —
fib dms. t.c.l. dlvd ..... lb 1.04 - —

ALCOHOLS

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root bgs ..... lb 1.50 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E of Rockies lb. 2.38 - —
Alkali blue, toner, litho flushed, 125-lb bbls., same basis, lb. 1.35 - —
Alkali blue prices 1c higher W of Rockies
Allethrin, 90%, dms., frt. alld lb.28.80 -28.90
Soln., 20%, dms., 200-2,000 lb lots, frt. alld lb. 6.50 6.55
2½% dms frt alld. ..... lb. .95 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l dlvd. ..... lb. .32½- —
dms., t.c.l., dlvd. ..... lb. .34 - —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide 55-lb cbys 5,005 lbs or more, works lb. 1.50 - —
55-lb cbys. 1,045 to 4,950 lbs works lb. 1.55 - —
55-lb. cbys., 55 to 990 lbs works lb. 1.60 - —
Allyl chloride, dms., c.l., dlvd lb. 17½- —
dms., t.c.l., dlvd ..... lb. .19 - —
tanks, dlvd ..... lb. .15 - —
Allyl isothiocyanate (see Mustard Oil, syn.).
Almond oil, artif bitter (see Benzaldehyde)
Almond oil nat., bitter, f.p.a., bots. lb 2.75 3.45
NF, bots. ..... lb. 3.00 3.39
sweet, USP, ens., dms ... lb. .70 1.30

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph.	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz	ounce
		E.	east	p-	para
		e.p.	end point	Pac	Pacific
a.p.a.	available phosphoric acid	equald.	equalized	pf.	proof
		exp.	expressed	phos.	phosphate
approx.	approximately	Ext.	external	photo.	photographic
artif.	artificial	F.	fahrenheit	pkgs.	packages
ASTM	American Society for Testing Materials	ferment.	fermentation	powd.	powdered
		f.f.a.	free fatty acid	precip.	precipitated
		f.f.c.	free from chlorine	prod.	producer
Atl.	Atlantic	fib.	fiber	pt.	point
Be.	Baume	f.o.b.	free on board	pulv.	pulverized
bbls.	barrels	f.p.a.	free of prussic acid	purif.	purified
bgs.	bags	frt.	freight	redist.	redistilled
bls.	bales	gal.	gallon	refd.	refined
bots.	bottles	gran.	granular	refy.	refinery
b.p.	boiling point	grd.	ground	reg.	regular
b.p.l.	bone phosphate of lime	i.&a.	iron and aluminum	resub.	resublimed
		i.b.p.	initial boiling point	ret.	returnable
b.r.	boiling range	imp.	imported	SD	specially denatured
bxs.	boxes	incl.	included	s.d.	single distilled
C.	centigrade	indust.	industrial	S E.	southeast
cbys.	carboys	kgs.	kegs	sec.	secondary
CD	completely denatured	l-	laevo	secs.	seconds
c.i.f.	cost, insurance, freight	lacq.	lacquer	s.g.	specific gravity
		lb.	pound	shipt.	shipment
cks.	casks	l.c.l.	less carlots	soln.	solution
c.l.	carlots	l.t.l.	less truckload	s.u.	standard unit
cns.	cans	liq.	liquid	syn.	synthetic
coml.	commercial	mfrs.	manufacturers	tanks.	railroad tankcars
conc.	concentrated	m-	meta	tech.	technical
CP	chemically pure	m.a.p.	mixed aniline point	tert-	tertiary
cps.	centipoises	min.	minimum	t.l.	truckloads
cryst.	crystalline	m.p.	melting point	t.w.	tankwagons
cs.	cases	N-	nitrogen	USP	U. S. Pharmacopoeia
ctns.	cartons	n-	normal	vis.	viscosity
cyls.	cylinders	nat.	natural	VM&P	varnish makers & painters
d-	dextro	neut	neutral	W.	west
dbl.	double	NF	National Formulary	whse.	warehouse
denat.	denatured	NNR	New and Nonofficial Remedies	w.w.	water-white
dest-dist.	destructively—distilled				
dl-	dextro-laevo				
dist.	distilled				

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Aloe, Cape, cs. ..... lb. 35 - .40
powd. cs. ..... lb 60 .65
Curacao, kgs. ..... lb. .75 - —
powd., kgs. ..... lb. .85 - —
Aloin USP bbls., dms., kgs lb 4.25 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpinol (see a-Terpinol).
Alphatocopherol (see a-Tocopherol).
Alum ammonium, gran. bgs., works 100 lbs 4.30 - —
Lump, dms., works ... 100 lbs 5.05 - —
Powd., dms., works .... 100 lbs 5.20 —
USP, burnt., dms ..... lb .20 .21
hydrous, dms. ..... lb .07¾ .08
Alum potassium, gran., bgs. works. 100 lbs 4.55 —
Lump, dms., works .... 100 lbs 5.30 —
Powd., dms., works..... 100 lbs 5.45 —
USP, burnt., dms ..... lb. .20 .21
USP, hydrous, dms ..... lb. .07¾ .08
Alum, potash-chrome, dms .... lb. .17 —
Alumina, calcined, bgs. c.l., works. lb. .05¼- —
bgs., t.c.l., works ..... lb. .05½ .06¼
Aluminum acetate, basic soln., 24%, bbls. t.c.l. works lb. .14 - —
Aluminum chloride coml., anhyd., dms., c.l., works, frt equald lb. .16 - —
dms., t.c.l., works lb. 16½- —
cryst., dms. c.l., works 100 lbs.21.00 - —
dms., t.c.l., works 100 lbs.21.50 - —
Soln., 32° cbys., c.l., works .. lb. .0495- —
cbys., t.c.l., works ..... lb. .0570- .1000
tanks, works ..... 100 lbs. 3.95 - —
NF, gran., dms. works ... lb. .31 - .32
Aluminum fluoride tech., anhyd., bgs., c.l., works lb. .16¼- —
bgs., t.c.l., works ..... lb. .17¼- .19¼
bulk, c.l., basis 80% .... lb. .14½- —
Aluminum fluoride in fib. dms. 0.35c per lb. higher
Aluminum formate, basic soln., containers extra, c.l., works. 100 lbs.11.00 - —
containers extra, t.c.l., works. 100 lbs.11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .0365- —
bgs., 20,000-40,000 lb lots, same basis lb. 039 - —
bgs., 2,000-20,000 lb. lots, same basis lb. 049 - —
bulk, c.l., same basis lb. .03¼- —
Aluminum hydroxide, dried, USP XV, fib. dms., works lb. .82½- —
fib dms., contract, works lb. 79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib dms., works lb. .22 - —
9-9½% Al_2O_3, fib dms. works. lb. .19 - —
fib dms. contract, works lb. .18 - —
Aluminum hydroxide, tech., powd., (see Aluminum hydrate).
Aluminum metal, 99½% + 30-lb ingots, 10,000-lb lots, frt. alld lb. .2810- —
50-lb. pigs, 10,000-lb lots, frt alld. lb. .28 - —
Aluminum oxide, amorphous (see Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. 71 - —
Standard grade, dms lb. .48½- —
Aluminum powder, lining, extra-fine, dms lb 1.13 —
Standard grade, dms lb. .83 —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c per lb for 100-lb. dm., 1½c. per lb. for 50-lb dm. 3c per lb. for 10 lb can and 5c. to 12c. per lb. for smaller containers. Deduct 1c per lb for single shipment of 400 to 1,499 lbs. 2c for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs or more
Aluminum resinate, precip., 2.1% Al, dms lb. .45 - —
Aluminum stearate, dibasic, ctns. c.l lb. .39 —
ctns., t.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., t.c.l. ..... lb. .40 - .44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., t.c.l. ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton.41.00 - —
bulk, c.l., same basis ton.40.00 - —
lump, bgs., c.l., same basis ton.44.00 - —
iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.80 - —
bgs., t.c.l., works, frt. equald. 100 lbs. 4.30 - 8.30
USP, gran., 400-lb. dm., works. lb. .30 - —
USP, powd., dms., works lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 -10.00
P-Aminoacetanilide, tech., paste, dms., frt. alld lb. 1.57 —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.35 - 1.60
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 - —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld lb. 8.10 - —
p-Aminodiphenylamine, tech., solid, dms., frt. alld lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., t.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., t.c.l., frt. alld..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. ..... lbs. 2.50 - —
p-Aminophenol, dms., frt. alld. lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald. E. of Rockies ton.92.00 - —
refrigeration, tanks, works, frt. equald. E. of Rockies ton.94.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies. ton.95.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal., gray, bgs., c.l., works, frt. equald 100 lbs. 8.25 - —
bgs., t.c.l., same basis 100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, fib. dms. ton lots, works lb. 1.00 - —
fib dms. 1,000-lb. lots, works. lb. 1.05 - —
Ammonium biborate, gran., dms., c.l., works ton.325 - —
dms., ton lots, ex whse. 100 lbs.20.40 - —
dms., smaller lots, ex whse. 100 lbs 21.15 - —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 - —
dms., t.c.l., works ..... 100 lbs. 9.00 - —

Ammonium bichromate, dms., works lb .42 .43
Ammonium bifluoride dms., dlvd lb .2145 .2245
Ammonium bromide, NF, gran., dms., c.l. t.l. frt equald lb .44 . —
dms. l.c.l., same basis lb .46 . —
Ammonium carbonate USP lump, dms. c.l lb 15½- —
Ammonium chloride, white tech., fine gran. bgs. c.l. works 100 lbs 6.00 . —
bgs. l.c.l., works 100 lbs 8.00 8.45
USP gran. 350 lb dm lb 17¼- —
Ammonium citrate dibasic, 250-lb. dm f.o.b works lb .77 . —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride)
Ammonium gluconate tech., 200-lb. dm., f.o.b works E lb. .45 . —
Ammonium hydroxide (see Ammonia aqeous)
Ammonium iodide, NF, 25-lb. jar, f.o.b works lb 4.26 . —
Ammonium lauryl sulfate, dms., c.l., frt alld lb. .20½- —
dms. t.t.l. frt. alld lb .21½- —
tanks frt. alld lb .19½- —
Ammonium lignin sulfonate, bgs., c.l., works 100 lbs 3.25 . —
bgs., l.c.l., works 100 lbs. 3.40 . 3.65
Ammonium linoleate, 80%, dms., works lb. .50 . .55
Ammonium molybdate, CP, cryst., 400 lb dms. 15,000-lbs works. lb. 1.22 . —
400-lb dms., 2,000-lb contracts, works lb 1.23 . —
400-lb. lms., works lb. 1.24 . —
Ammonium nitrate, dom., fertilizer grade, 33.5% N, bgs., f.o.b. works ton.67.00 . —
Ammonium nitrate, dom., with dolomite, 20.5% N, bgs., c.l., Hopewell, Va ton.48.00 . —
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point frt. equald to $3 ton base price ton.64.00 . —
Ammonium oxalate, tech., fine gran., 250-lb. dm., f.o.b works E lb. .28½- —
Tech., powd. 200-lb. dm., same basis lb. .28½- —
Ammonium pentaborate, gran., bgs., c.l., works ton.193.00 . —
bgs., ton lots, ex whse 100 lbs.14.23 . —
bgs., smaller lots, ex whse. 100 lbs.15.48 -17.48
Ammonium pentaborate powder $10 per ton higher in bags.
Ammonium persulfate, tech., dms., 10-ton lots or more, works lb. .18 . —
dms., smaller lots, works lb. .20 . .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼- —
bgs., l.c.l., same basis lb. .10 . —
Dibasic, NF, V, bbls., dms lb. .46 . —
Dibasic, tech., bgs., c.l., works, frt. alld lb. .09¼- —
Ammonium silicofluoride, dms., works lb. .12¼- .13¼
Ammonium sulfamate, bgs., c.l., t.l., works lb. .19 . —
bgs., l.c.l., works lb. .20½- .27
Ammonium sulfate, standard granular, bulk, f.o.b works, base price ton.32.00 . —
Ammonium sulfate, standard, gran., purif., c.l., 100-lb bgs., f.o.b. works lb. .08½- —
Large granular, bulk, c.l. works ton.35.00 . —
bgs., c.l., works ton 40.00 . —
Tech., bulk, c.l., t.l., works ton 52.00 . —
bgs., c.l., t.l., works ton 56.00 . —
bgs., l.c.l., t.t.l., works 100 lbs. 3.20 . 5.20
Ammonium sulfide, liq., 40-44%, tanks, frt equald., 100% basis. ton.160.00 . —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate)
Ammonium thiocyanate, tech., cryst., dms. c.l., works lb. .20 . —
dms. l.c.l., works lb. .22 . .26
Tech, soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycolate, coml., 55-gal. dms., ton lots, 100% basis lb 1.15 . —
d-Amphetamine hydrochloride, monobasic, dms lb.17.50 .23.50
dl-Amphetamine hydrochloride, dibasic dms lb 4.50 . 6.00
d-Amphetamine phosphate, fib dms., 100-lb. lots lb.15.00 . —
dl-Amphetamine phosphate, dms.lb 4.20 . 5.60
d-Amphetamine sulfate, fib. dms. lb.15.00 -17.00
dl-Amphetamine sulfate, fib. dms., lb. 4.20 . 5.60

Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt alld E of Rockies lb. .18½- .19
dms., l.c.l., same basis lb. .20 . .20½
tanks, same basis lb. .16 . .16½
Amyl acetate, ex pentane, reg., dms., c.l., dlvd lb. .19 . —
dms., l.c.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .16½- —
tech., dms., c.l. dlvd. lb. .17 . —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd lb. .14½- —
Amyl acetate syn., oxo process, dms., c.l., dlvd lb. .19 . —
dms., c.l. dlvd. lb. .20½- —
tanks, dlvd lb. .16½- —
Amyl alcohol, ex fusel oil (see Fusel oil refd).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., dlvd lb. .43½- —
refd., ACS grade, dms., l.c.l., dlvd lb. .45½- —
ex pentane, mixed amyls, dms., c.l., frt. alld lb. .19 . —
dms., l.c.l. frt. alld lb. .20½- —
tanks, frt. alld. lb. .16½- —
Amyl alcohol, primary, dms., c.l., frt. alld lb. .20¼- —
dms., l.c.l. frt. alld lb. .21¾- —
tanks, frt. alld lb. .17¾- —
Sec-synthetic, dms., c.l., works, frt. alld lb. .19 . —
dms., l.c.l., same basis lb .20½- —
tanks, same basis lb. .17 . —
Tert-synthetic, dms., c.l., frt. alld. E lb. .17 . —
dms., l.c.l., frt. alld. E. lb. .18½- —
tanks, frt. alld E. lb. .14½- —
Amyl alcohol 1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., l.c.l., works lb. .43 . —
tanks, works lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 . —
dms., l.c.l., works lb. .70 . —
tanks, works lb. .60 . —
Amyl n-butyrate, dms. lb 1.00 1.25
Amyl cinnamic aldehyde, dms lb 1.70 2.20
p-tert Amyl phenol, dms., c.l., works. lb. .26¾- —
dms., l.c.l., works lb. .27¾- —
Amyl salicylate, cns., dms. lb. .71 . —
Amyris oil, dms. lb 1.55 . —
Anethol, tech., dms. lb. .80 .92
USP, cns., dms. lb. 1.05 . —
Angelica root, bas lb .85 .90
Angelica root oil, bots lb.120.00 140.00
Angelica seed oil, bots lb.120.00 130.00
Aniline dms. c.l., frt. alld lb. .20 . —
dms., l.c.l., frt. alld. lb. .21 . —
tanks, frt. alld. lb .18 . —
Aniline oil (see Aniline).
Aniline salt, dms., c.l. t.l., 20,000 lbs. min., frt. alld lb. .33 . —
dms., l.c.l., same basis lb. .35 . —
Anise oil, USP, dms. lb 1.75 3.00
Anise seed, Mexican, bgs. lb. .24 . —
Spanish, bgs. lb. .24 . —
Anisic aldehyde, dms lb 1.50 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 . —
dms., l.c.l., same basis lb. .82 . —
tanks, same basis lb. .78 . —
p-Anisidine, dms., works lb. .97 . —
Anthracene, 90-95%, dms., c.l., t.l. f.o.b., works lb. .42½- —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 . —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.15 . —
Anthraquinone, 99.5%, bgs., c.l., frt. alld lb. .70 . —
bbls., l.c.l., same basis lb. .73 . —
Electrical grade, bgs., l.c.l., same basis lb. 1.10 . —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .29 . —
cs., c.l., mines lb. .29½- —
Antimony oxide, bgs., c.l., frt. alld. lb. .26½- —
bgs., l.c.l., frt. alld. lb. .28 . —
Prices of antimony oxide are 2% higher west of the Rockies.
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd lb. .23 . —
bgs., smaller lots, dlvd lb. .24 . .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 . —
pails, l.c.l., works lb. .43 . —
Antimony-potassium tartrate, tech., powd., 250-lb., dm., f.o.b. works, E lb. .69½- —
USP, powd., 250-lb. dm., same basis lb. .74½- —
Apomorphine hydrochloride, USP, bots., 25-oz. lots oz.35.60 . —
Apricot kernel oil, USP, dms lb. .55 . .70
Arabic gum, amber sorts, 10 bgs. lb. .27 . —
USP, powd., bbls lb. .31 . .34
Areca nuts, powd., bbls. lb. .13 . —
Arecoline hydrobromide, NF, bots., tins, 100 oz. or more oz. 4.00 . —
l-Arginine, free base, dms., 10-kilo lots or more kilo.90.00 . —
l-Arginine glutamate, dms., 10-kilo lots or more kilo.60.00 . —
l-Arginine monohydrochloride, dms., 10-kilo lots or more kilo.60.00 . —
Arnica flowers (true Montana), bls. lb. .75 . —
Aromatic petroleum solvents (see Solvent Naphtha, petroleum, aromatic).
Arsenic, crude (95%), bulk, c.l., works lb. .016 . —
bbls., c.l., works lb. .0.31 . —
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b. works lb. .48 . —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls., l.c.l. works lb .06½- .07½
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb 3.70 . —
Light shades, bbls. lb. 2.85 . —
Asafetida gum, cns lb. .38 . .40
Powd., bbls., dms lb .75 . .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons), mines ton.80.00 . —
7D, c.l (30 tons), mines ton.75.00 . —
7F, c.l (30 tons), mines ton.71.00 . —
7H, c.l (30 tons), mines ton.61.00 . —
7K, c.l. (30 tons), mines ton.50.00 . —
7M, c.l. (30 tons), mines ton.44.00 . —
7R, c.l. (30 tons), mines ton.43.00 . —
7RF, c.l (30 tons), mines ton.44.00 . —
7T, c.l. (30 tons), mines ton.41.00 . —
7TF, c.l. (30 tons), mines ton.44.00 . —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP, dms., 100-kilos. kilo. 7.35 . —
dms., less than 100-kilos kilo.7.75 . —
Ash, black (see Barium sulfide).
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.43.00 . —
ex-whse, 5 tons or more, N. Y., N. J ton.89.50 . —
select, brilliant black, 340°-360°F. fusing pt., bgs., c.l., mines. ton.46.00 . —
270°-295°F. fusing pt., bgs., c.l., mines ton.43.00 . —
Asphalt, petroleum, cut-back, tanks, tankwagon, refy gal. .09½- —
emulsion, tanks, tankwagon, refy. gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy. ton.21.00 . —
85-300 penetration, tanks, tankwagon, refy. ton.20.00 . —

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Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins ..... oz. 5.75 - 7.50
Atropine sulfate USP, bots..... oz. 5.25 - 5.75
Azelaic acid, bgs., c.l., dlvd. ....lb. .40 - —
bgs., ton lots, same basis.....lb. .41 - —

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .65 - —
less than 1,000,000,000 units. 50,000 units. .70 - —
Balm of Gilead buds, dried, bgs lb. 1.25 - 1.35
Barberry root bark, bgs ..... lb. 1.00 - 1.10
Barbital, NF, 100-lb. dms., f.o.b. works lb. 4.50 - —
Barbital sodium, NF, 100-lb. dms. lb. 4.75 - —
Barium carbonate, precip., bgs., c.l., works ton.111.50 - —
bgs., smaller lots, works ton.126.50 - —
Barium chlorate, dms., works lb. .32 - .41
Barium chloride, anhyd., bgs., c.l., works ton.176.00 - —
bgs., l.c.l., works ton.196.00 - —
NF, cryst., dms., 400-lbs., works lb. .23 - —
Tech., cryst., bgs., c.l., works. 100 lbs. 7.00 - —
bgs., l.c.l., works ....100 lbs. 8.00 - —
Barium chromate, bgs., frt. equald. lb. .38 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton.208.00 - —
bgs., l.c.l., t.t.l., frt. equald ton.218.00 - —
Barium monohydrate, 99%, bgs., c.l., frt. equald. 100 lbs.11.25 - —
bgs., l.c.l., frt. equald. 100 lbs.11.75 - —
Barium monoxide (see Barium oxide).
Barium nitrate, bbls., c.l., t.l., dlvd. lb. .16 - —
bbls., l.c.l., t.t.l., dlvd..... lb. .17 - —
Barium oxide, grd., dms., c.l., t.l., frt equald. ton275.00 - —
dms., l.c.l., t.t.l., frt. equald. ton.285.00 - —
Barium peroxide, dms., frt. equald. lb .20 - —
Barium stearate, ctns., c.l., frt. alld. lb. .41 - —
ctns., l.c.l, same basis ..... lb. .42 - .46
Barium sulfate, tech. (see Barytes and blanc fixe).
Barium sulfide, dms., c.l., works. ton.100.00 - —
dms., l.c.l., works..... ton.110.00 - —
Barytes, southern, off-color, bgs., mines ton.30.00 - —
85-75%, bgs., mines..... ton.30.00 - —
white, water-grd., paper bgs., c.l., St. Louis ton.60.00 -60.25
paper bgs., ex whse., New York..ton 84.85 - —

Battery acid, cbys., c.l., works E. 100 lbs. 2.35 - —
cbys, l.c.l., works, E.....100 lbs. 2.65 -10.95
Bauxite, bulk, mines..... ton. 7.00 -10.00
Bay oil, NF, Puerto Rican, 50-55%, cns lb. 2.40 - 2.70
55-60%, cns. ..... lb. 2.55 - —
NF, West Indian, 50-55%, cns. dms lb. 2.50 - —
Bayberry wax, bgs..... lb. .65 - .70
Beeswax, crude, African, bgs....lb. .54 - .55
Brazilian, bgs. ..... lb. .56 - .57
Central American, bgs..... lb. .53 - —
Chilean, bgs. ..... lb. .56 - .57
Refd., USP, bleached white, bricks, 100-lb. ctns..lb. .67 - .69
white, slabs, 100-lb. ctns...lb. .66 - .68
yellow, bricks, 100-lb. ctns lb. .59 - .61
yellow, slabs, 100-lb. ctns. lb. .58 - .60
Belladonna leaf, bls. ..... lb. .24 - .26
Belladonna root, bls. ..... lb. .28 - .35
Bentonite, dom. 200 mesh, bgs., c.l., mines..ton.14.00 - —
Imp. Italian, white, high gel., bgs., 5-ton lots, ex whse. ton.95.20 - —
bgs., 1-ton lots, ex whse. ton.99.00 - —
Imp. Italian, white, low gel., bgs., 5-ton lots, ex whse ton.93.40 - —
bgs., 1-ton lots, ex whse ton.97.16 - —
Benzal chloride, cbys., works lb. .44 - —
Benzaldehyde, NF, dms. ..... lb. .80 - 1.05
Tech., dms., c.l., t.l..... lb. .47 - —
dms., l.c.l. ..... lb. .48 - —
Benzene, pure or nitration, tanks, works:
Baton Rouge, La.....gal. .34 - —
Bethlehem, Pa .....gal. .34 - —
Birmingham district ..gal. .34 - —
Chicago district .....gal. .34 - —
Cleveland district ....gal. .34 - —
Geneva, Utah .....gal. .34 - —
Houston, Tex. .....gal. .34 - .40
Johnstown, Pa. .....gal. .34 - —

Benzene, pure or nitration, tanks, works:
Lorain, Ohio .....gal. .34 - —
Middletown, Ohio .....gal. .34 - —
Mennequa, Colo. ....gal. .34 - —
Philadelphia district....gal. .34 - —
Pittsburgh district ....gal. .34 - —
Port Arthur, Tex. ....gal. .34 - —
St. Louis, Mo. District.gal. .34 - —
Sparrows Point, Md. gal .34 - —
Syracuse, N. Y. .....gal. .34 - —
Terre Haute, Ind.....gal. .34 - —
Youngstown, Ohio ....gal. .34 - —
Lackawanna, N. Y. ..gal. .34 - —
Lone Star, Tex.....gal. .34 - —
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, bgs., c.l., t.l., consignment, dlvd. gamma-unit. .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0065- —
Tech., low gamma, bgs., c.l., t.l., consignment, dlvd gamma-unit. .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0056- —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., l.c.l., same basis lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls., dlvd. lb 2.20 - —
AAOT, bbls., dlvd. ..... lb. 2.55 - —
Lightfast, bbls., dlvd. ..... lb. 3.40 - —
Benzocaine, dms., 100-lbs., frt. alld. lb. 3.25 - —
Benzoic acid, tech., dms., c.l., t.l., frt. alld. lb. .25 - .37
dms., l.t.l., same basis..... lb. .29 - .41
tanks, same basis ..... lb. .21 - —
USP, bbls., dms., ton lots lb. .48 - —
bbls., dms., 1,000-lb lots lb. .50 - —

BENZOL

Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum, Sumatra, cs. .....lb. .32 - —
Benzophenone, dms. ..... lb. 1.40 - 1.65
Benzotriazole, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt. equald.lb. .21 - —
cbys., smaller lots, frt. equald. lb. .23 - —
Benzoyl chloride, cbys., dms., c.l., works, frt. equald. lb. .22 - —
cbys., l.c.l., same basis lb .23 - —
tanktrucks, dlvd. Metropolitan area lb. .21 - —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb lots, works lb. .98 - 1.08
Benzyl acetate, f.f.c., cns., dms. lb. .54 - —
Benzyl alcohol, NF, dms. ..... lb. .54 - —
Tech., dms., dlvd. lb. .47½- .65
Benzyl benzoate, USP, 40-lb. dms lb. .64 - —
Benzyl chloride, tech., cbys., dms., c.l., works, frt. equald lb. .22½- .25¼
cbys., dms., l.c.l., same basis lb. .23½- .25¼
tanktrucks, dlvd. Metropolitan area lb. .21 - —

A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices are ½c. lower.

Benzyl cinnamate, cns. ..... lb. 3.30 - 3.60
N-Benzyl-N,N-dimethylamine, 50 dms., frt. alld. lb. 1.25 - —
12-49 dms., same basis..... lb. 1.35 - —
1-11 dms., same basis..... lb. 1.90 - —
Benzyl formate, cns. ..... lb. 1.85 - 2.10
Benzyl isoeugenol, cns..... lb 9.25 - —
Benzyl propionate, bots. ..... lb. 1.35 - 1.65
Benzyl salicylate, bots ..... lb. 1.50 - 1.85
Benzylidine acetone, bots. ..... lb. 1.75 - 1.80
Benzylidine chloride (see Benzal chloride).
Berberine bisulfate, cns. ....lb.56.50 - —
Berberine hydrochloride, bots....lb.56.50 - —
Bergamot oil, nat., NF, Italian, cns. lb.11.00 -12.00
Betagammapicoline (see b,g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betamethylnaphthalene (see Methylnaphthalene).
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, tech.).
Biotin, cryst., bots ..... gram.10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns ..... lb. 1.50 - 1.90
Rectified, cns. ..... lb. 1.75 - 2.00
Bismuth chloride, jars ..... lb. 5.11 - —
Bismuth hydroxide, dms ..... lb. 4.60 - 4.65
Bismuth metal, bxs., ton lots....lb. 2.25 - —
Bismuth nitrate, cryst., 250-lb. dm. lb. 2.25 - —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb. 4.42 - —
Bismuth subcarbonate, USP, 150-lb. dm lb. 3.70 - —
Bismuth subgallate, NF, 200-lb. dm., f.o.b. works lb 4.43 - —
Bismuth subiodide, fib dms lb. 5.37 - —
Bismuth subnitrate, NF, 200-lb. dm., f.o.b. works lb. 3.15 - —
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works lb. 4.25 - —
Bismuth trioxide, 100-lb. dms., f.o.b. works lb. 4.40 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Bisphenol-A, bgs., c.l., t.l., single shipt., 70,000-lbs. or more, frt. alld lb. .29½- —
bgs., c.l., t.l., less than 70,000 lbs., same basis lb. .30 - —
bgs., l.c.l., same basis ..... lb. .31 - —
Blackberry root bark, bls..... lb. .50 - .55

BLACK PIGMENTS

Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

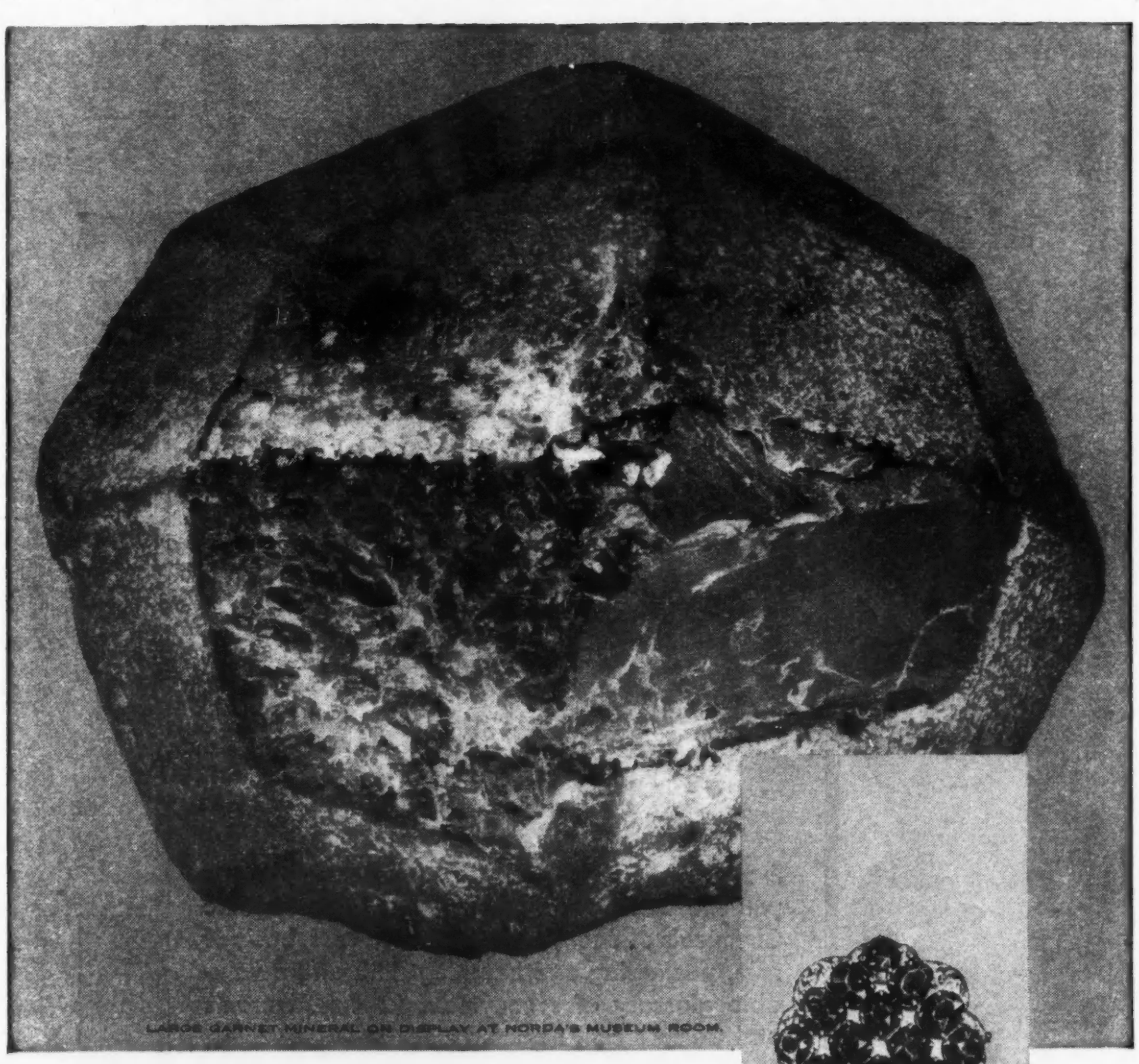
Blanc fixe, direct process, bgs., c.l., works ton.160.00 - —
bgs., l.c.l., works..... ton.170.00 - —
bgs., l.c.l., New York whse ton.[illegible] - —
Blood, dried, 16-16½% ammonia, bgs., New York unit-ton. 5.50 - —
Bloodroot, bls. ..... lb. .85 - .90

BLUE PIGMENTS

Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate)
Bois de rose oil, Brazilian, dms. lb. 2.05 - —
Peruvian, dms. ..... lb. 1.65 - —
Bole acid maroons, pure, bbls lb 1.75 - —
Designated, bbls. lb 1.50 - —
Bone black, dms., c.l., frt. alld. lb. .1750- .2225
l.c.l., works ..... lb. .1950- .2425

Pacific coast bone black prices 3¼c. per lb. higher.


LARGE GARNET MINERAL ON DISPLAY AT NORDA'S MUSEUM ROOM.

Why every facet of a Norda Fragrance sparkles true to Nature

Odor "gems" Norda creates capture all that Nature intended—reflect the master-touch Norda experts have with the world's best raw materials.

So, naturally, Norda scents give you the full, deep glow of perfection for products people take to. Which "gem" can Norda make for you?

Norda makes good scents

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Bonemeal, steamed, works, E. ton 80.00 • —
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip. (see Calcium phosphate, tribasic).
Borax, tech., anhyd., 99½%, bgs., c.l., works ton 92.00 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 7.42 • —
bgs., smaller lots, same basis 100 lbs. 8.67 -10.67
bulk, c.l., works ton 83.00 • —
Borax, tech., gran., decahydrate, 99½%, bgs., c.l., works. ton 50.00 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 5.32 • —
bgs., smaller lots, same basis 100 lbs 6.57 - 8.57
bulk, c.l., works ton 43.50 • —
pentahydrate, 99½%, bgs., c.l., works ton 64.50 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 6.05 • —
bgs., smaller lots, same basis 100 lbs. 7.30 - 9.30
bulk, c.l., works ton 58.00 • —
USP powd., bgs., c.l., works. ton 54.00 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.45 • —
bgs., smaller lots, same basis. 100 lbs 7.70 - 9.70
Bordeaux powder, tribasic bgs., c.l., dlvd lb. .24 • —
bgs., l.c.l., same basis lb. .26 • —
Boric acid, tech, anhyd, 99.9% bgs., c.l., works ton 335.00 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 19.62 • —
bgs., smaller lots, same basis. 100 lbs. 20.87 -22.87
cryst, 99.9% bgs., c.l., works. ton 163.50 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 11.05 • —
bgs., smaller lots, same basis. 100 lbs. 12.30 -14.30
Boric acid, tech., cryst., 99.9%, dms., c.l., works ton 188.50 • —
dms., ton lots, ex whse., New York or Chicago. 100 lbs. 12.30 • —
bgs., smaller lots, same basis 100 lbs. 13.05 • —
Boric acid, gran., 99.9%, bgs., c.l., works ton 112.00 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 8.47 • —
bgs., smaller lots, same basis. ton 174.25 • —
dms., c.l., works ton 137.00 • —
dms., ton lots, ex whse, New York or Chicago 100 lbs. 9.72 • —
dms., smaller lots, same basis 100 lbs. 10.47 • —
bulk, c.l., works ton 106.00 • —
powd., bgs., ton lots, ex whse., New York or Chicago. 100 lbs. 8.85 • —
bgs., smaller lots, same basis 100 lbs. 10.10 -12.10
Boric acid, powd., dms., smaller lots, same basis 100 lbs. 11.45 • —
USP boric acid $25 per ton higher in bags.
Borneol, cns. lb. 2.75 • —
Boron trichloride, CP, 1,800-lb. cyls., works lb. 1.25 • —
100-lb cyls, works lb. 1.70 • —
Boron trifluoride, gas, cyls., t.l., works lb. .70 • —
cyls., l.t.l., works lb. .70 • —
Brimstone (see Sulfur).
Broenner's acid, bbls. lb. 1.53 • —
Bromine, purif., cs., c.l., t.l., dlvd, E of Rockies lb. .32 • —
cs., l.c.l., same basis lb. .34 • .39
ret. dms., c.l., t.l. dlvd. E. of Rockies lb. .31 • —
ret. dms., l.c.l., same basis lb. .31 • .34
tanks, same basis lb. .21½ • —
Bromochloromethane, dms., c.l., frt. equald lb. .48 • —
dms., l.c.l., same basis lb. .50 • —
tanks, same basis lb. .47 • —
Bromoform, pharmaceutical grade, 5-gal. cby., frt. equald lb. 1.95 • —
Bromstyrol, bots lb. 5.35 5.70
Brucine, cns oz. Nominal.
Brucine sulfate, NF, cns. 1.45 1.75
Buchu leaves, bbls. lb. .65 • .70

BROWN PIGMENTS

Brown pigment quotations are listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd. cyls., c.l., refy lb. .21 • —
cyls., l.c.l., refy. lb. .22 • —
tanks, dlvd. lb. .12¾ • .13½
Butene-1, tanks, works lb. .0625 • —
Butene-2, tanks, works lb. .0570 • —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 • —
dms., l.c.l., same basis lb. .18½ • —
tanks, same basis lb. .14½ • —
Syn., dms., c.l., dlvd. E lb. .17 • —
dms., l.c.l., same basis lb. .18½ • —
tanks, same basis lb. .14½ • —
sec-Butyl acetate, syn., dms., c.l., dlvd. E lb. .14¾ • —
dms., l.c.l., same basis lb. .16¼ • —
tanks, same basis lb. .12¼ • —
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld. E lb. .42½ • —
dms., l.t.l. same basis lb. .43½ • —
tanks, same basis lb. .40 • —
Prices of n-Butyl acrylate are 1c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash
n-Butyl alcohol, ferment, dms., c.l., frt. alld lb. .18 • —
dms., l.c.l., frt. alld. lb. .19½ • —
tanks, frt. alld. lb. .15½ • —
n-Butyl alcohol, syn., dms., c.l., dlvd lb. .18 • —
dms., l.c.l., frt. alld lb. .19½ • —
tanks, dlvd. lb. .15½ • —
Sec-synthetic, dms., c.l., dlvd lb. .15 • —
dms., l.c.l., dlvd. lb. .16½ • —
tanks, dlvd. lb. .12½ • —
n-Butyl alcohol, tert-synthetic, dms., c.l., frt. alld., dlvd E lb. .16 • —
dms., l.c.l., same basis lb. .17½ • —
tanks, same basis lb. .13½ • —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works lb. .37½ • —
dms., l.c.l., works lb. .38¼ • —
n-Butyl ether, dms., c.l., works lb. .35¼ • —
dms., l.c.l., works lb. .36 • —
tanks, works lb. .33¼ • —
Butyl lactate, dms., c.l., frt. alld. E. Rockies lb. .42½ • —
dms., l.c.l., same basis lb. .43½ • —
tanks, same basis lb. .40 • —
Butyl laurate, dms., works lb. .37½ • —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 • —
dms., l.c.l., works lb. .55½ • —
Butyl oleate, refd., dms., l.c.l., works lb. .32 • —
Butyl phenylacetate, dms. lb. 4.50 • 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt alld. E. of Rockies lb. .27¼ • —
dms., l.c.l., same basis lb. .28¼ • —
Butylamine (see Mono-, Di- and Tributylamine).
tert-Butylamine, dms., c.l., t.l., f.o.b. works lb. .47 • —
dms., l.c.l., same basis lb. .47½ • —
tc., t.t., same basis lb. .45 • —
Butylated hydroxyanisole, food grade, dms., dlvd. lb. 4.75 • —
6-tert-Butyl-m-cresol (see Mono-tert-butyl-m-cresol).
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
1,3-Butylene glycol, dms., c.l., t.l., dlvd lb. .20½ • —
dms., l.c.l., t.t.l., f.o.b. works lb. .22 • —
tanks, dlvd. lb. .18 • —
p-tert-Butylphenol, bgs., c.l., dlvd., lb. .27½ • —
bgs., l.c.l., works lb. .28½ • —
Butyraldehyde, dms., c.l., dlvd lb. .22 • —
dms., l.c.l., dlvd. lb. .23½ • —
tanks, dlvd lb. .19½ • —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 • —
dms., l.c.l., same basis lb. .34½ • —
tanks, same basis lb. .32½ • —
Butyric ether (see Ethyl butyrate).
Butyrolactone, dms., c.l., t.l., works. lb. .40 • —
dms., l.c.l., same basis lb 43 • —
n-Butyronitrile, dms., c.l., dlvd. lb. .56½ • —
dms., l.c.l., dlvd. lb. .57½ • —
tanks, dlvd. lb. .54 • —

C

Cacao butter (see Cocoa butter).
Cadmium CP red dark shade, bbls., frt. alld. E. of Rockies lb 5.55 • —
Light shade, bbls., same basis lb 4.65 • —
medium shade, bbls., same basis. lb. 5.30 • —
Medium light shade, bbls., same basis lb. 4.90 • —
Orange-red shade, bbls., same basis lb. 4.30 • —
Yellow, all shades, bbls., frt. alld. E. of Rockies lb. 2.85 • —
Cadmium iodide, 25-lb. fib. dms. lb. 6.75 - 7.00
Cadmium metal, ingots or sticks, ton lots, cs., dlvd. lb. 1.60 • —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld E. of Rockies lb. 1.65 • —
Cadmium-mercury lithopone red, dark shade, bbls., same basis lb. 1.95 • —
Red, light shade, bbls., same basis. lb. 1.72 • —
Red, medium shade, bbls., same basis lb. 1.87 • —
Red, medium light shade, bbls., same basis lb. 1.80 • —
Red, maroon shade, bbls., same basis lb. 2.03 • —
Cadmium-selenide lithopone maroon, bbls., frt. alld E. of Rockies lb. 2.76 • —
Orange, bbls., same basis lb. 1.58 • —
Cadmium-selenide lithopone red, orange-red shade, bbls., same basis lb. 1.72 • —
Red, dark shade, bbls., same basis. lb. 2.56 • —
Red, light shade, bbls., same basis. lb. 1.88 • —
Red, medium shade, bbls., same basis lb. 2.00 • —
Red, medium-light shade, bbls., same basis lb. 2.23 • —
Cadmium-selenide, lithopone, yellow, all shades, bbls., frt alld. E of Rockies lb 1.19 • —
Caffeine, NF, citrated, dms., 100-lb. lots or more lb 2.70 • —
USP, nat., cryst., anhyd., dms., 100-lb lots or more lb 2.10 • —
Caffeine, USP nat., cryst. hydrous, dms., 100-lb lots or more. lb 1.96 • —
USP, syn., anhyd., dms., 100-lb. lots or more lb 2.10 • —
cryst., hydrous, dms., 100-lb lots or more lb 1.96 —
Cajuput oil, native, cns. lb 1.75 2.00
Redist. USP cns lb 1.90 2.10
Calamine USP dms. lb. .34 —
Calamus oil bots. lb. 12.00 20.00
Calciferol, cryst., 10-kilo or more lots, works gram .54 —
1-10 kilo lots gram .55 • —
Calciferol, in edible oil (see Viosterol).
Calcium p-aminosalicylate trihydrate fib. dms., 100 lbs. or more frt adjusted lb 3.10 • —
Calcium bromide, NF jars, 100 lbs. or more lb. .97 • —
Calcium carbide, standard generator size, 600-lb. dms., c.l., dlvd ton 149.00 • —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton 10.50 • —

Brominating Agents

Five chemical agents to improve your process or products

AS PROCESS IMPROVERS: Brominating agents produce smo[illegible] reactions from which the desired product is readily isolated in high yields. Because bromine is a mild oxidizing agent, addition and substitution reactions predominate and oxidation-produced by-products are minimized. Isolation of organic bromides by decantation is relatively simple because of their high densities; and separation of organic bromides from reactant solvents is sharper because of their low vapor pressures.

AS PRODUCT IMPROVERS: Many bromine compounds impart superior flame resistance to plastics, textiles, and protective coatings. Other bromine compounds impart excellent germicidal, bactericidal and algicidal activity to end products. If these properties would add new sales potential to your products, it will pay you to consider these brominating agents.

1. Bromine, Dry—Br_2 Dark, reddish-brown, volatile liquid. Very reactive brominating agent and mild oxidizing agent in the manufacture of organic and inorganic bromides, intermediates, dyes, photo chemicals, pharmaceuticals, and perfumes. Moisture content of less than 30 ppm permits use in nickel and Monel equipment.

2. Hydrobromic Acid 48% and 62%—HBr Clear, colorless, or light amber fuming liquids. Used for the manufacture of inorganic metal bromides, aliphatic bromides, pharmaceuticals, dyes, and intermediates.

3. 1, 3-Dibromo-5, 5-dimethylhydantoin—$(CH_3)_2\underline{C}N(Br)CON(Br)\underline{C}O$ Fine, stable powder with a minimum active bromine content of 54%. An effective and economical reagent for controlled brominations of aromatic and unsaturated aliphatic compounds, especially in the allylic position.

4. Tetramethyl Ammonium Chlorodibromide—$(CH_3)_4NClBr_2$ Orange crystalline solid (59.4% available bromine). An easily handled solid which yields elemental bromine.

5. Phosphorus Tribromide—PBr_3 Colorless or slightly yellowish clear liquid. Used in the preparation of organic bromides, especially for brominating alcohols without rearrangement. Also used as a catalyst and analytical reagent.

Technical information on these brominating agents is available. Inquiry by letter, wire or telephone handled promptly.

Michigan Chemical has plant facilities for large-scale synthesis of custom organic and inorganic bromine and non-bromine intermediates. We invite your inquiry.

MICHIGAN CHEMICAL CORPORATION

532 North Bankson Street, Saint Louis, Michigan

Eastern Sales Office: 230 Park Avenue, New York 17, N.Y.

For complete listing of Michigan Chemical products, see your copy of Chemical Materials Catalog

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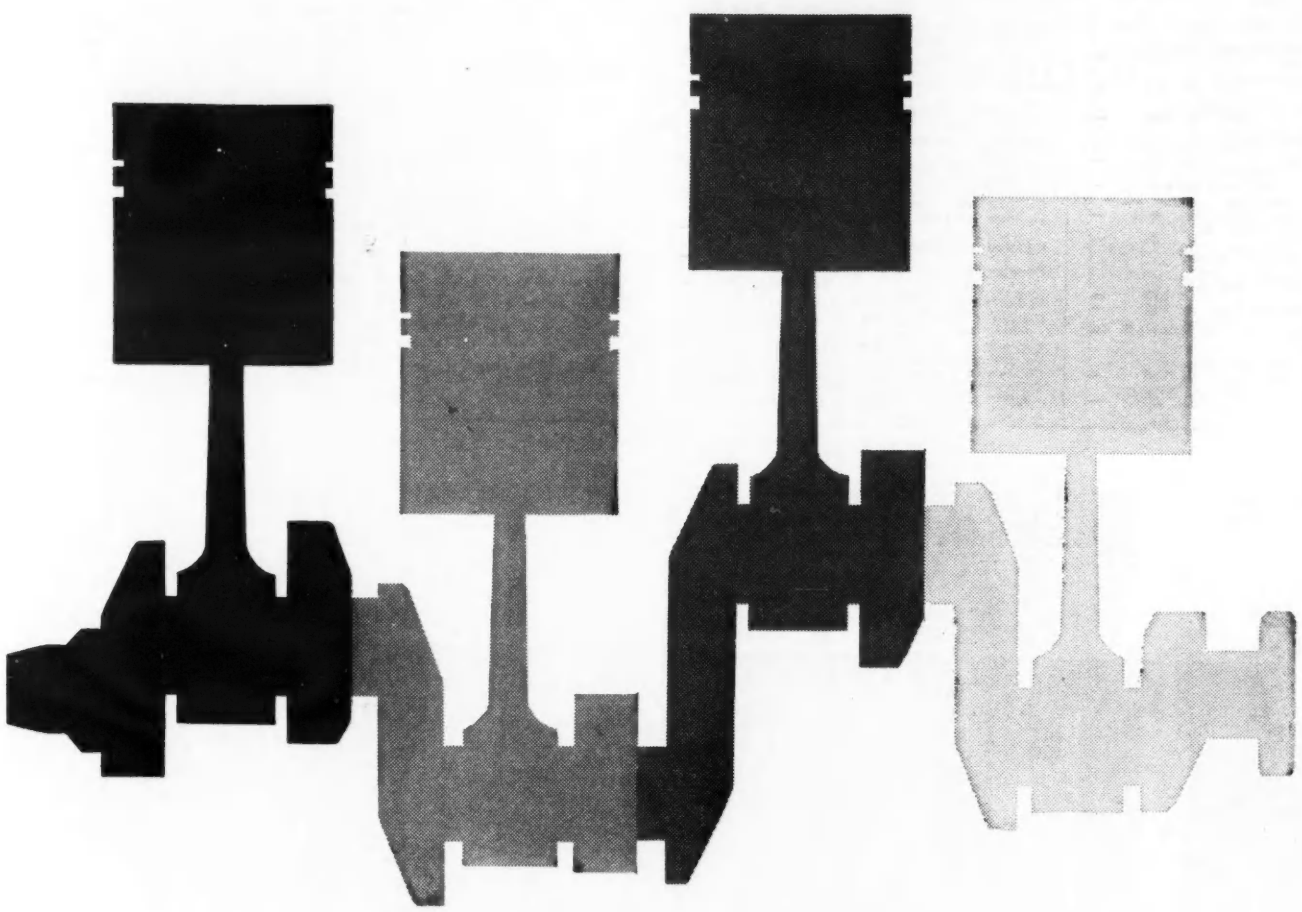
Calcium Carbonate—Coaltar Pitch

Calcium carbonate, chalk, whiting, 325 mesh, bgs., c.l., works, ton 32.00 - 34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton 30.00 - —
10 to 20 microns, bgs., c.l., works ton 17.00 - 18.00
precip., dense, bgs., c.l., works ton 30.00 - 38.50
bgs., l.c.l., works ton 45.00 - 53.50
medium, bgs., c.l., works ton 38.00 - —
bgs., l.c.l., works ton 48.00 - 53.00
Calcium Carbonate, surface treated, bgs., c.l., works ton 42.00 - 44.00
bgs., l.c.l., works ton 57.00 - 59.00
ultrafine, bgs., c.l., works ton 117.50 - 167.50
bgs., l.c.l., works ton 137.50 - 187.50
Calcium chloride conc., flake or pellet 94-97%, paper bgs., c.l., works, frt equald ton 39.30 - —
Flake, 77-80%, paper bgs., c.l., works, frt equald ton 32.00 - —
Liquor, 40%, tanks frt equald ton 12.50 - —
Powd, 77% min., paper bgs., c.l., works, frt equald ton 37.00 - —
Purif., gran., dms lb .27 - —
Calcium chloride solid, 73-75%, dms., c.l., trt. equald ton 29.50 - —
dms., l.c.l., works trt equald ton 36.00 - 73.00
USP gran., dms. lb .32 - —
Calcium chromate, bgs., dlvd lb .37 - —
Calcium cyanide dms., c.l., dlvd E. of Rockies lb. .20 - —
dms., l.c.l., same basis lb .24 - .55
Calcium cyclamate, 100-lb dms lb 1.95 - —
Calcium gluconate, USP, AA grade, 100-lb dm., ton lb 73½ - —
USP, powd, 100-lb dm., ton lb .66½ - —
Calcium hydride (lump) dms., works, lb. 2.20 - 3.00
Calcium hypochlorite, high test, gran., 45-lb. cs., dlvd E. of Rockies cs. 23.85 - 25.60
100-lb dms, same basis dm. 33.30 - 36.55
Calcium hypophosphite, dms, 1,000-lb lots lb 1.28 - —
Calcium iodide, jars ih. 4.52 - —
Calcium lactate NF, dms., f.o.b. works lb. .43 - .46
Calcium mandelate, USP, 150-lb. dm., works lb. 3.25 - —
Calcium naphthenate, liq., 4% Ca., dms., frt equald lb. .30 - —
Calcium pantothenate, USP, jars, 1 kilo or more kilo. 35.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenosulfonate, dms lb. 1.24 - 1.25
Calcium phosphate, dibasic, USP, bgs., c.l., frt equald 100 lbs. 16.00 - —
Dibasic, feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton 86.00 - —
bgs., c.l., t.l., f.o.b. Texas City works ton 80.50 - —
bgs., l.c.l., frt equald ton 96.00 - —
Dibasic, feed grade, 21% P., bgs., c.l., t.l., frt. equald ton 97.65 - —
bgs., l.c.l., frt. equald ton 107.65 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bgs., c.l., prices.
Calcium phosphate, monobasic, bgs., 10,000-lb. lots, frt. equald, 100 lbs. 7.45 - —
bgs., smaller lots, same basis, 100 lbs. 7.95 - —
Tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs., l.c.l., frt. equald 100 lbs. 10.00 - —
Calcium propionate, any quantity, dms., dlvd E. of Rockies, lb. .34½ - —
Prices W. of Rockies 3c. per lb. more.
Calcium phytate, bgs., 50 lbs. or more, f.o.b. warehouse N. Y. lb. .39 - —
Calcium resinate, precip., dms., frt. alld., works lb. .45 - —
Calcium silicate hydrated, bgs., c.l., works lb. .06 - —
bgs., l.c.l., works lb. .06½ - —
Calcium silicate, paint grade (see Wollastonite).
Calcium stearate, ctns., c.l. lb. .39 - —
ctns., l.c.l. lb. .40 - 44
Calomel, NF, mild, powd., dms., 100-lbs., f.o.b. works lb. 4.32 - —
NF, mild, precip., dms., 100-lbs., f.o.b. works lb. 5.67 - —
Camphene, 46° m.p., dms incl., c.l., works lb. .15 - —
dms, incl., l.c.l. same basis lb. .16½ - —
tanks, same basis lb. .12½ - —
Camphene, chlorinated, 67-69% (see Toxaphene)
Camphor, monobromated, NF, dms., kgs lb. 3.63 - 3.70
Nat. USP powd. cs., 100-lb. lots, lb. .60 - .65
tablets, 1-oz. cs lb. .85 - .90
Nat., USP gran., bbls., 2,000-lb. lots lb. .59 - —
Camphor, syn., tech., 1 bbl. or more, lb. .48 - —
USP, gran., powd., bbls., 1,000-lb. lots lb. .60 - —
bbls., smaller lots lb. .61 - —
tablets, ctns., 1,000-lb. lots, lb. .85 - —
ctns., 500-lb lots lb. .86 - —
ctns., smaller lots lb. .87 - —
Camphor oil, sassafrassy, dms. lb .35 - .55
White, dms. lb .26 - .50
Cananga oil, native, cns. lb 5.00 - 6.50
Rectified, cns lb 7.25 - 10.00
Candelilla wax, crude, bgs lb. .55 - .56
Refd., pure, bgs lb. .60 - .62
Powdered Candelilla wax 20 to 100 mesh, 8c. higher.
Cantharides, Chinese, cs. lb. 1.00 - —
powd., bgs. lb. 1.15 - —
Russian, bgs. lb 2.00 - 2.15
powd., bgs. lb 2.15 - 2.30
Capric acid, dms lb. .30¾ - .33½
tanks lb. .28¼ - —
Caprolactum monomer, bgs., c.l., t.l., f.o.b. works lb. .52 - —
bgs., l.c.l., l.t.l., same basis lb. .57 - —
tanks, same basis lb. .49 - —
Capryl alcohol, 85% dms., c.l., t.l., works lb. .19 - —
dms., l.t.l., same basis lb. .19½ - —
tanks, frt. equald. lb 16½ - —
Sec., 92-99%, dms., c.l., f.o.b. works lb. .22 - —
dms, l.c.l., f.o.b. works lb. .23 - —
tanks, f.o.b. works lb. .19½ - —
Caprylic acid, dms lb. .30¾ - .33¼
tanks lb. .28¼ - —
Capsicum (see Pepper red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms lb. 4.00 - —
NF, from African pepper, dms, lb 4.50 - —
Caraway oil, NF, dms lb. 3.15 - 3.75
Caraway seed, Danish, bgs. lb .16 - —
Dutch, bgs. lb .21 - —
Polish, bgs. lb. .17¼ - —
Carbazole, 97%, bbls, ton lots, works lb. 1.05 - —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .08 - —
bgs., c.l., works lb. .08½ - —
bgs., l.c.l., works lb. .16¼ - —
Furnace, fast extruding, bgs., c.l., works lb. .06¾ - —
ctns., l.c.l., whse. lb. .13½ - —
Carbon black, high abrasion, bulk, c.l., works lb. .07¼ - —
bgs., c.l., works lb. .07¾ - —
bgs. l.c.l., dlvd or whse lb. .14½ - —
high modulus, bgs., c.l., works, lb. .06¼ - —
ctns. l.c.l., whse lb. .13 - —
semi-reinforcing, bgs., c.l., works lb. .05¾ - —
bgs., ctns., l.c.l., whse lb. .12½ - —
pigment, high color beads, ctns., c.l., works lb. .78 - —
ctns., l.c.l., dlvd or whse lb. .87 - —
medium color, uncompressed, bgs., c.l., works lb .14 - —
bgs., l.c.l., dlvd or whse lb. .22½ - —
Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd Metropolitan areas, E ton. 60.00 - 115.00
bulk, 3,000,000 lbs or more, dlvd Metropolitan areas, E ton. 55.00 - —
Solid, bulk, wholesale works ton. 85.00 - —
Carbon disulfide, 55-gal dms., c.l., works, frt. equald to competitive points lb. .071 - —
55-gal. dms., l.c.l., same basis lb. .086 - .091
5-gal dms., 30 dms to c.l., same basis lb. .131 - —
5-gal dms., less than 30 dms., same basis lb. .161 - —
tanks, dlvd. lb. .0520 - —
Carbon tetrachloride CP, consumers, dms., c.l., frt alld. lb. .12¾ - —
dms., l.c.l., frt alld. lb. .15¼ - —
Tech., consumers dms., c.l., t.l., frt. alld lb. .11¾ - —
dms., l.c.l. t.l.l., frt. alld lb. .14¼ - —
tanks, frt alld lb. .10¾ - .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF dms., 100-lb lots, works lb. 4.00 - 4.25
dms., smaller lots, works lb. 4.10 - 4.75
Cardamom oil, NF, bots. lb. 39.00 - 42.00
Cardamom seed, bleached "A" lb 3.50 - —
Bleached "B" lb 3.25 - —
Decorticated Alleppey, cs lb 2.15 - —
Guatemala, cs lb 3.05 - —
Green, Alleppey, bgs. lb 2.15 - —
Ceylon, bgs lb. 2.25 - —
Carmine No. 40, NF, bulk, 100-lb lots or more, dlvd. lb. 16.80 - —
bulk, smaller lots, dlvd. lb. 16.90 - 17.30
Carnauba wax, chalky, bgs., ton lots lb. .72 - .73
North Country, No. 2, crude, bgs., ton lots lb. .81 - .83
refd., pure, ton lots lb. .87 - .88
North Country, No. 3, Ceara, ton lots lb. .71 - .72
North Country No. 3, Parnahyba, ton lots lb. .72 - .73
No. 3, refd., pure, bgs., ton lots, lb. .80 - .82
No. 1, Ceara, yellow, bgs., ton lots lb. .98 - 1.00
Parnahyba, yellow, bgs., ton lots lb. 1.00 - 1.02
Powdered carnauba wax, 20 to 100 mesh 8c. per lb. higher.
Carotene, tech., 1,350,000 A units per gram tins, 5-10 kilo lots, dlvd gram. .20½ - —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 - —
USP, microcrystalline in oil, 400,000 A units per gram., dms., dlvd million units. .144 - —
b-Carotene, in vegetable oil, semi-solid suspension 400,000 A units per gram cns kilo. 57.60 - —
b-Carotene, liquid in vegetable oil, 500,000 A units per gram, cns kilo. 72.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram, cns. kilo. 240.00 - —
Carvol, bots. lb. 5.00 - 5.40
Cascara sagrada bark, bulk lb. .32 - —
Casein, dom., edible, acid precip., 30 mesh., bgs., 10,000-lb. lots or more, works lb. .56 - —
edible, acid precip., 80 mesh, bgs., 10,000-lb lots or more, works lb. .64 - —
Imp., inedible acid-precip., grd., Argentine, bgs., c.l., ex-dock Eastern seaports lb. .19 - .19½
Australian, bgs., c.l., same basis lb. .22¼ - .22½
Cashewnut shell, liquid, treated, dms., c.l., Newark, N.J. lb. .24 - —
dms, ton lots, same basis lb. .25 - —
t.w., same basis lb. .22½ - —
Cassella acid, dms., frt alld., 100% basis lb 1.44 - 1.75
Cassia oil, redist., USP, cns lb 7.50 - 9.00
Cassia cutting, "A," bls. lb .30 - —
"B," bls. lb. .31 - —
"C," bls. lb .28 - —
Korintje "A," bls. lb. .34 - —
"B," bls. lb. .30 - —
"C," bls. lb. .30 - —
Castor oil, dom., blown, dms., c.l. lb. .2550 - —
dms., l.c.l. lb. .2650 - —
Castor oil, dom., dehydrated, bodied, dms., c.l lb. .2700 - —
dms., l.c.l. lb. .2850 - —
tanks lb. .2500 - —
dehydrated, unbodied, dms., c.l. lb. .2500 - —
dms., l.c.l. lb. .2660 - —
tanks lb. .2360 - —
hydrogenated, bgs., c.l. lb. .2450 - —
bgs., ton lots lb. .2850 - —
bgs., l.c.l., dlvd lb. .3050 - —
Castor oil, No. 1, dms., c.l. lb. .2150 - —
dms., l.c.l. lb. .2300 - —
tanks lb. .2000 - —
No. 3, tech., dms., c.l. lb. .2125 - —
dms., c.l., lb. .2225 - —
tanks lb. .1925 - —
Refd, deod, dms., c.l. lb. .2650 - —
dms., l.c.l. lb. .2750 - —
tanks lb. .2450 - —
USP, dms., c.l. lb. .2250 - —
dms., l.c.l lb. .2450 - —
tanks lb. .2150 - —
Imported, No. 1, Braz., tanks lb. .18¾ - —
Sulfonated, 50%, dms., works lb. .15 - .15½
75%, dms. works lb. .19 - .19½
Castor oil acids, dehydrated, dms. lb. .41¼ - .43¼
Split, dms. lb. .33¾ - .34¾
Castor pomace, bgs., c.l., works ton. 35.00 - —
Castoreum nat., cns. lb. 5.25 - —
Syn., cns. lb 9.00 - —
Catechol, CP, cryst., fib., dms., works lb. 2.17½ - —
Resub., dms., works lb. 4.29½ - —
Catnip leaves, Southern, bls. lb. Nominal.
Caustic potash (see Potash caustic).
Caustic soda (see Soda, caustic).
Cedarleaf oil, USP XIII cns., dms. lb. 3.25 - 3.50
Cedarwood oil, cns., dms lb .70 - —
Celery seed, French, bgs. lb .37 - —
Indian, bgs. lb .19 - —
Cellulose acetate, flake, powd., bgs., t.l., dlvd E lb. .36 - .51
Cellulose acetate butyrate, powd., 17% butyryl content, bgs., dlvd E lb. .545 - .555
27% butyryl content, bgs. dlvd, E lb. .595 - .605
38% butyryl content, bgs. dlvd, E lb. .545 - .555
38% butyryl content, half-second, bgs., dlvd E lb. .545 - .555
50% butyryl content, bgs. dlvd, E lb. .585 - .595
Cellulose gum, methyl (see Methyl Cellulose)
Cellulose gum, pure, high vis., bgs., 23,000-lb lots or more works, frt alld lb. .57 - —
ogs., smaller lots, same basis lb. .59 - —
Cerium hydrate 74% CeO fib dms., 100-lb lots or more lb. 1.40 - —
77% CeO, fib dms., 100-lb lots or more lb. 1.74 - —
Cerium oxalate (see Rare earth oxalate)
Cerium oxide, optical grade, bgs., 50-lb lots or more, dlvd, lb 1.85 - 1.90
bgs., smaller lots, dlvd lb 2.15 - —
Cetyl alcohol, NF, fib cns., c.l., t.l., dlvd E lb. .41½ - —
fib. cns., l.c.l., same basis lb. .43½ - —
tanks, same basis lb .39 - —
Extra, cns., c.l., t.l., dlvd E lb. .48½ - —
fib cns., l.c.l., same basis lb .50½ - —
tanks, same basis lb .46 - —
Chalk (see Calcium carbonate)
Chamomile flowers, Hungarian, bls lb .90 - 1.00
Roman, cs. lb. 1.75 - 2.00
Chamomile oil, blue, Hungarian, bots lb. 350.00 - —
Charcoal, activated, NF, fib. dms., c.l., works lb. .25 - .32
fib. dms., 5-ton lots, works lb. .26½ - .32½
fib. dms., smaller lots, works lb. .27 - .50
Charcoal, black (see Charcoal, activated).
Charcoal, bone (see Bone black).
Charcoal, hardwood, lump, bulk, c.l., f.o.b. plant ton. 55.00 - —
briquets, bulk, c.l., f.o.b. plant ton. 80.00 - —
5-lb. paper bgs., c.l., same basis ton. 106.00 - —
20-lb. paper bgs., c.l., f.o.b. plant, ton. 90.00 - —
40-lb. paper bgs c.l., same basis ton. 86.00 - —
Chenopodium oil, NF, cns lb. 4.25 - 5.00
Chicago acid, paste, bbls., frt. alld. lb. 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech., 94% min., dms., c.l., works lb. .23 - —
dms., l.c.l., works lb. .24 - —
tanks, multiple units, 5 cars, dms., l.c.l., works lb. .21 - —
Chloral hydrate, USP, jars, 1,000-lb. lots lb. 1.00 - —
jars, 500-lb. lots lb. 1.03 - —
jars, 100-lb. lots or less lb. 1.05 - —
Chlordan, agricultural, dms., c.l., frt. alld lb. .65 - —
dms., l.c.l., 5,000-10,000-lb. lots, frt. alld lb. .66 - —
Chlordan, clarified, dms., c.l., frt. alld lb. .69 - —
dms., l.c.l., 5,000-10,000-lb. lots, frt. alld lb. .70 - —
Chlorinated paraffin, 40%., dms., c.l., frt. alld lb. .15 - —
dms., l.c.l., 10 dms or more, same basis lb. .16 - —
70%, dms., c.l., same basis lb. .18½ - —
dms., l.c.l., 10 dms or more, same basis lb. .19½ - —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works lb. .60 - —
ctns., l.c.l., works lb. .61 - —
125 cps., ctns., c.l., works lb. .70 - —
300 cps., ctns., c.l., works lb. .80 - —
Chlorine, liq., cyls., c.l., works, frt equald lb. .11 - —
cyls., l.c.l., Metropolitan area lb. .12½ - .13¾
tanks, single units, works, frt. equald 100 lbs. 3.25 - —
tanks, multiple units, 5 cars, works, frt. equald 100 lbs. 4.15 - —
tanks, multiple units, 4 cars, same basis 100 lbs. 4.35 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.35 - 5.85
tanks, multiple units, 1 car, same basis ⅝ 100 lbs. 6.25 - 7.25
Chloroacetic acid, mono, flake, 99%, purif, dms., c.l lb. .23½ - .25½
dms. l.c.l. lb. .24½ - —
tech., flake, 96-97%, dms., c.l., dms., l.c.l., frt. equald lb. .20 - —
frt. equald lb. .19 - —
2-Chloro-4-aminotoluene, tech., liq., dms., frt alld lb. 1.03 - —
4-Chloro-2-aminotoluene, fused, bbls. lb 1.38 - —
6-Chloro-2-aminotoluene, tech., liq., dms., frt. alld lb. .66 - —
m-Chloroaniline, dms., c.l., frt. alld. lb. .75 - —
dms., l.c.l., same basis lb. .77 - —
tanks, same basis lb. .73 - —
o-Chloroaniline, dms., c.l., frt. alld. lb. .52 - —
dms., l.c.l., same basis lb. .54 - —
tanks, same basis lb. .50 - —
p-Chloroaniline, dms., c.l., frt. alld. lb. .77 - —
dms., l.c.l., same basis lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works lb 1.05 - —
dms., l.t.l., same basis lb. 1.20 - —
p-Chlorobenzaldehyde, dms., l.c.l., works lb. 1.95 - —
o-Chlorobenzoic acid, fib. dms., t.l., works lb. 1.10 - —
fib. dms., smaller lots, works lb. 1.25 - —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works, lb. 2.25 - —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 - —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms., c.l., dlvd. lb. .27 - —
dms., l.c.l., dlvd. lb. .30 - —
tanks, minimum 4,000 gals. dlvd. lb. .25 - —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .81 - —
Powd., dlvd. E., 100% basis lb. .86½ - —
4-Chloro-2-nitroaniline, powd., dlvd. E lb. .86 - —
4-Chloro-2-nitrophenol, tech., paste, dms., frt. alld lb. .75 - —
4-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld. lb. .99 - —
6-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld. lb. .17 - —
o-Chlorophenol, dms., c.l., frt. equald. lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
Chloropicrin, coml., cyls., 180 lbs., frt. alld. lb. 1.07 - —
cyls., 100 lbs., same basis lb. 1.08 - —
cyls., 50 lbs., same basis lb. 1.14 - —
Chlorosulfonic acid, dms., c.l., frt. equald lb. .0465 - —
dms., l.c.l. frt. equald lb. .0515 - —
tanks, frt. equald lb. .0415 - —
Chlorosulfonic acid, in stainless steel dms ½c. per lb. higher
o-Chlorotoluene tech., dms., t.l., works lb. .37 - —
dms., l.c.l., t.l.l., same basis lb. .38 - —
Choline bitartrate, fib. dms., frt. adjusted kilo 2.75 - 3.00
Choline chloride, fib. dms., frt. adjusted kilo. 2.75 - 3.00
Choline dihydrogen citrate, fib dms frt adjusted kilo 2.75 - 3.00
Chrome green CP, dark, light, medium blue content, 1-15%, bbls, dlvd E of Rockies. lb. .43 - —
blue content 16-30%, bbls., same basis lb. .44 - —
medium blue content, 41-45% bbls. same basis lb. .44 - —
blue content, 45-49%, bbls., same basis lb. .45 - —
Chrome green, reduced color 25%, bbls., same basis lb. .20 - —
Chrome green prices 1c higher W. of Rockies.
Chrome orange CP bbls., dlvd. E of Rockies lb. .35 - —
Chrome orange prices 1c higher W. of Rockies.
Chrome yellow CP bbls., dlvd E. of Rockies lb. .35 - —
Chrome yellow price 1c higher W. of Rockies.
Chromic acid, 99¾%, dms., c.l., works, frt. equald lb. .29½ - —
dms., l.c.l., dlvd. N. Y. Metropolitan area lb. .30 - .31
Chromic acid, NF (see Chromium trioxide).
Chromium acetate, soln., 7½%, dms., 500-2,000-lb. lots, works, lb. .10 - —
Chromium fluoride, bbls., works lb. .51 - .52
Chromium oxide, hydrated, bbls., fib dms., c.l., frt. alld. lb. 1.20 - —
Pure, bgs., c.l., frt alld lb. .44½ - —
bgs., l.c.l., same basis lb. .45¼ - —
Chromium trioxide, NF, bots lb. 1.15 - —
Cinchona bark, NF, red, broken, bgs lb .25 - —
NF, yellow broken, bgs lb. .35 - .40
Cinnamic acid, refd., bots lb. 2.50 - 3.50
Cinnamic alcohol, bots. lb. 1.60 - 1.75
Cinnamic aldehyde, dms lb. .80 - 1.00
Cinnamon, Ceylon, No. 2, bgs lb. .53 - —
Ceylon, No. "0000," bgs. lb. .73 - —
Cinnamon bark oil, bots lb. 36.00 - 70.00
Cinnamon leaf oil, crude, dms lb. 1.60 - 2.00
USP (Cassia), cns., dms lb. 8.50 - 13.50
Citral, CP, bots. lb. 3.60 - 4.00
Extra, bots. lb. 3.60 - 5.00
Syn., dms. lb. 7.25 - 7.40
Citric acid, USP, anhyd., fine gran., bgs., dms., c.l lb. .29½ - .30
bgs., dms., 10,000-lb. lots, 1 shipt lb. .30 - .30½
bgs., dms., smaller lots lb. .30½ - .31
Citric acid, USP, hydrous, fine gran., bgs., dms., c.l lb. .27½ - .28
bgs., dms., 10,000-lb. lots, 1 shipt lb. .28 - .28½
bgs., dms, smaller lots lb. .29 - .29½
Powdered citric acid ½c. per lb. higher.
Citronella oil, Ceylon, dms lb 1.00 - —
Java-type, dms. lb. .88 - —
Citronellal, bots., dms lb 1.60 - 2.10
Citronellol, bots., dms. lb. 1.90 - 2.50
Citronellol, synthetic, dms lb. 1.70 - —
Civet, artif., bots lb. 13.75 - 15.00
Nat., bots. oz. 8.50 - 15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn ton. 17.50 - 21.50
crushed, shed moisture, bulk, c.l., Tenn ton 8.00 - 11.25
imp., airfloated, bgs., c.l., Atl. port net-ton. 43.00 - 47.00
lump, bulk, Atl. port net-ton. 31.50 - 37.50
Clay, China, dom., dry-grd., airfloated, 99%, 325 mesh, Georgia, bgs., c.l., works, ton. 11.00 - 17.00
Georgia, bgs., l.c.l., works, ton. 13.50 - 22.50
imp., white, lump, bulk, c.l., ex-dock, Philadelphia, Portland, Me, long-ton. 23.00 - 35.00
white, powd., bgs., c.l., ex dock, net-ton. 50.00 - —
bgs., l.c.l., ex whse net-ton. 60.00 - 70.00
Cleaners naphtha, petroleum, 105° F Flash, tankcars, New Jersey and New York gal. 18 - —
Group 3 gal. .12675 - —
Houston, Texas gal. .145 - —
140 F Flash, tankcars, New Jersey or New York gal. .205 - —
Group 3 gal. .154 - —
Houston, Texas gal. .17 - —
Cleve's acid, tech., mixed, solid, dms., frt. alld lb. 1.05 - —
1.6, tech., solid, dms., frt. alld lb. .77 - —
1.7, tech., dms., frt alld lb. 2.20 - —
Cloves, Madagascar, bgs. lb. .38½ - —
Zanzibar, bgs. lb. .38½ - —
Clove bud oil, USP, dms lb. 2.70 - 3.60
Clove leaf oil, crude, dms. lb. 1.25 - —
CMC, crude, 96.4% low or medium vis., bgs. or fib dms., 23,000 lbs., dlvd. E., 100% basis lb. .41½ - —
96.4% low or medium vis., bgs. or fib. dms., less than 23,000 lbs., dlvd. E., 100% basis lb. .43½ - —
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .41½ - —
bgs. or fib. dms., l.c.l., dlvd. E., 100% basis lb. .43½ - —
purif., high vis. (see Cellulose gum).
CMC, standard low or medium vis., bgs., 23,000 lbs., works, frt. alld lb. .57 - —
bgs., smaller lots, same basis. lb. .59 - —
CMC prices W. of the Rockies are 2c. per lb lower and are on a works basis.
Coaltar, crude, resale tor soln., tanks, works gal. .17 - —
Refd., resale, indust., dms., c.l., ex whse gal. .35 - —
dms., l.c.l., ex whse gal. .39 - —
tanks, works gal. .20½ - —
Coaltar pitch, aluminum, bulk, works, ton. 44.00 - —
Carbon and indust., bulk, works, ton. 44.00 - —
Core, bulk works ton. 40.50 - —
Fiber, bulk works ton. 48.00 - —
Roofing, 140-155°F., Federal Specification RP-381 Type 1 tanks, works ton. 41.00 - —



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Cobalt acetate, 23.7% Co., dms., dlvd lb 1.04 • —
Cobalt blue, genuine, 250 lb bbls. dlvd E of Rockies lb 4.90 • —
Cobalt blue prices 1c higher W. of Rockies
Cobalt blue imitation (see Ultramarine blue)
Cobalt carbonate 48% Co., powd., bgs., dlvd lb 1.45 • —
Cobalt chloride, 24.2% Co., dms., dlvd lb .93 • —
Cobalt hydrate, 60-61% Co., dms., dlvd lb 2.05 • —
Cobalt linoleate, fused 8½% Co., dms lb .71½- —
Liq. 6% Co., dms lb .57½- —
Cobalt metal, 99% dms., f.o.b carrier lb 1.50 • —
Cobalt naphthenate liq. 6% Co., dms., dlvd lb .48¾- —
Cobalt nitrate 20.1% Co. bbls. dlvd. lb .75 • —
Cobalt oxide, black, ceramic grade, 72½ 73½% Co., kgs., dlvd E of Mississippi R. lb 1.15 • —
70-71% Co kgs. same basis lb 1.12 • —
Cobalt oxide prices 3c W of Mississippi R. 3c. per pound higher.
Cobalt phosphate powd., 32.1% Co., dms., dlvd lb 1.35 • —
Cobalt resinate, fused, 3% Co., dms lb .38½- —
Cobalt sulfate, cryst., 21% Co., dms., dlvd lb .64 • —
Monohydrated, 33% Co., dms., dlvd lb 1.09 • —
Cobalt tallate, 6% Co., dms. dlvd. lb .44 • —
Cocaine, USP, cns., 100-oz. lots, f.o.b works oz 17.50 • —
Cocaine hydrochloride, cns., 100-oz. lots f.o.b. works oz 13.75 • —
Cocillana bark bls lb 18 • .20
Cocoa butter, bgs lb .61 • .66
Coconut oil crude tanks, New York lb .13¾- —
tanks, Pac. coast lb .12½- —
Refd., deodorized, dms lb .19½- .20½
Coconut oil acids, dist., dms lb .23½- .26
tanks lb .21 • —
double dist. (stripped), dms lb .24½- .27
tanks lb .22 • —
Cod oil, dms, spot lb .08¾- .08½
Codeine, NF, cns., 100-oz. lots oz 13.25 • —
Codeine hydrochloride cns., 100-oz. lots oz 11.75 • —
Codeine phosphate, USP, cns., 100-oz. lots oz 10.25 • —
Codeine sulfate, USP, cns., 100-oz. lots oz 10.75 • —
Codliver oil, USP, dms gal 1.40 • 1.70
Cohosh root, black, bls lb .20 • .25
Blue, bls lb .20 • .25
Colchicine, USP, bots oz 29.00 • —
Colchicum root, bls lb .35 • .45
Colchicum seed, bgs lb .75 • .80
Collodion, USP dms lb .32½- —
USP flexible dms lb .34 • —
Colocynth pulp, bls lb .75 • —
Colombo root, bls lb .16 • .18
Condurango bark bls lb .18 • .20
Congo copal gum, No. 1, bgs lb .26 • .27
No 2, bgs lb .23 • .25
No 3, bgs lb .18 • .20
Copaiba balsam, cns., dms lb .65 • 1.10
Copaiba oil, cns lb 1.35 • 2.00
Copper acetate bbls., c.l., works lb .53 • —
bbls., l.c.l., works lb .54 • —
Copper carbonate, 55%, bgs., c.l., works lb .3635- —
bgs., l.c.l., works lb .3785- —
Copper chloride cupric, anhyd., dms., works lb .45½- .46
cryst., dihydrate, dms., works lb .31 • .31½
cryst., dried, dms, works lb .39¼- .39¾
Copper chloride cuprous, dms., works lb .4135- .4435
Copper cyanide, tech., dms., 20,000-lb lots or more lb .609 • —
dms., 1,000-lb lots or more lb .619 • —
dms., smaller lots lb .639 • .65
Copper gluconate dms lb 3.20 • —
Copper hydrate dry, dms, c.l., frt. E of Miss lb .53½- —
dms., l.c.l., same basis lb .54 • —
Copper metal, electrolytic, dlvd. Valley basis lb .33 • .36
Copper naphthenate, liq., 8% Cu, dms, frt alld lb .26½- —
Copper nitrate, tech., cryst., dms., works lb .30¾ .32¾
Copper oleate, solid, 9% Cu, dms., works lb .45 • —
Copper oxide, black, bbls., 100-5,000-lb lots, works lb .49¼- —
Copper oxide, red, 97%, USN Type 1, bbls., 100-5,000-lb lots, lb .50½- —
90%, USN Type II, bbls., 100-5,000-lb lots or more, works, lb .48½- —
Copper quinolinolate, 18% Cu, dms., ton lots lb 4.25 • —
10% active quinolinolate, dms lb 1.14 • 1.19
Copper resinate, precip., dms., frt. alld lb .47 • —
Copper sulfate, CP, gran., dms., works lb .1885- —
Cryst., 99%, bgs., c.l., works, 100 lbs. 13.00 —
bgs., l.c.l., works 100 lbs. 13.25 -15.75
Monohydrated, 35%, dms., c.l., works 100 lbs. 24.00 • —
dms., l.c.l., works 100 lbs. 24.75 • —
Tribasic, distributors, bgs., c.l. works 100 lbs. 29.60 • —
bgs., l.c.l., works 100 lbs. 31.10 • —
Copper undecylenate, dms lb 2.75 —
Copra, Atl., Gulf ports, c.i.f. ton. 167.50 • —
Pac. ports c.i.f. ton. 162.50 • —
Coriander oil, USP, bots. lb 7.25 8.75
Coriander seed, Moroccan, bgs. lb .12 —
Rumanian, bgs. lb .10½- —
Yugoslavian bgs lb .08½- —
Corn oil, crude, tanks, works lb .12½- —
Foots (soapstock) acid, 95%, tanks, New York lb .05 • —
Refd., salad, dms lb .1823- .1850
tanks lb .1623- —
Corn oil acids, dist., dms lb .14¾- .17¼
tanks lb .12¼- —
Corn sugar, tanners, chipped, paper bgs. c.l. 60,000 lbs. min. 100 lbs. 7.30 • —
paper bgs., l.c.l 100 lbs 7.45 • —
Corn syrup, 42° Be., tanks, f.o.b. plant 100 lbs 5.41 • —
non-ret. dms., c.l., same basis 100 lbs. 7.52 • —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP bots., kilo or more gram 1.05 1.75
Costus oil, bots oz 6.00 —
Cottonseed meal, 41%, bgs Memphis ton. 57.00 —
Cottonseed oil crude, tanks, South, East lb .09½- .09¾
tanks, Valley lb .09⅜- —
tanks, Texas, Waco lb .09⅜- —
tanks, Texas, Lubbock lb .09¼- .09⅜
Foots (soapstock), acid, 95% tanks, Texas, Waco lb .03¼- —
Refd., salad, dms. lb .14¾- .15
tanks lb .12¾- —
Cottonseed oil acids, dist., dms. lb .14¾- .17¼
tanks lb .12¼- —
Coumarin, NF, cryst., dms lb 3.30 3.40
Cramp bark, NF, bls lb .90 1.00
Cream of tartar (see Potassium bitartrate)
Creosote carbonate, NF, bots, cbys., lb 3.05 3.26
Creosote, coaltar, crude, tanks, works, frt. adjusted gal .24 —
Crude, soln 80%, tanks, works, gal .226 —
Refd., dms., c.l., works gal .50 • —
dms., l.c.l., same basis gal .62 • —
tanks, same basis gal .38 —
West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c. per gallon for coaltar
Creosote, beechwood, cbys., dms., f.o.b. works, dlvd. in Metropolitan area lb 1.72 1.77
Hardwood, NF, cbys., dms., same basis lb 1.42 1.47
Pinewood, dms., incl. c.l., works, lb .0561- —
dms., incl., l.c.l., works lb .0634- —
dms., incl., l.c.l., ex whse, New York lb .0745- —
tanks, works lb .0460- —
Creosote oil (see Creosote coaltar).
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret, dms., c.l., frt. alld lb .16½- —
non-ret. dms., l.c.l., same basis lb .17½- —
tanks, same basis lb .145 • —
Cresol, USP, 50% 204°C., dry above 207°C., wide distillation range, non-ret, dms., c.l., same basis lb .18 • —
non-ret. dms., l.c.l., same basis, lb .19 • —
tanks, same basis lb .16 • —
m-Cresol, 95-98%, dms., c.l., works, lb .60 • —
dms., l.c.l., works lb .61 • —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb .18 • —
dms., l.c.l., same basis lb .19 • —
tanks, same basis lb .16 • —
2,97% 2°C., dms. c.l., frt. equald, lb .22 • —
dms., l.c.l., same basis lb .23 • —
tanks, same basis lb .20 • —
o-Cresol, 30.5°C. m.p and over, ret., dms., c.l., frt equald lb .17 • —
ret. dms., l.c.l., same basis lb .18 • —
tanks, same basis lb .15 • —
30°-30.49°C m.p., dms., c.l., frt. equald lb .16½- —
ret. dms., l.c.l., same basis lb .17½- —
tanks, same basis lb .14½- —
o-Cresol, 30.5°C m.p and over, ret.
Cresol, 29°-29.9°C. m.p., dms., c.l., frt equald lb .16 • —
ret. dms., l.c.l., same basis lb .17 • —
tanks, same basis lb .14 • —
25°-28°C. m.p., dms., c.l., frt. equald lb .15 • —
ret. dms., l.c.l., same basis lb .16 • —
tanks, same basis lb .13 • —
p-Cresol, 98%, dms., c.l., dlvd lb .52 • —
dms., l.c.l., dlvd lb .53 • —
tanks, dlvd lb .49 • —
2,3-Cresotic acid, dms., ton lots, works lb .70 • —
dms., smaller lots, works lb .72 • —
p-Cresyl methyl ether, cns lb 1.80 • 2.05
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt equald gal 1.35 • —
dms., l.c.l., same basis gal 1.40 • —
tanks, same basis gal 1.15 • —
metapara content 25% or less, dms., c.l., t.l., same basis gal 1.20 • —
dms., l.c.l., same basis gal 1.25 • —
tanks, frt. equald gal 1.00 • —
Cresylic acid, coaltar, imp., meta-para content 25% or less, f.o.b. works, frt. equald, to competitive points, 50 dms. or more, gal 1.03¼- —
less than 50 dms., same basis gal 1.05 • 1.15
tanks, same basis gal 1.00 • —
Crotonaldehyde, 91-93%, dms., l.c.l, works lb .25 • —
Crotonic acid, dms., 200 lbs. or more, l.c.l., dlvd lb .36 • —
Cryolite, nat., indust., bgs., c.l., works 100 lbs. 13.00 • —
bgs., l.c.l., works 100 lbs. 14.25 • —
Cube root, powd., 5% rotenone, bgs., t.l., works lb .21 • —
bgs., l.t.l., works lb .22 • —
Cubeb berries, NF, bgs lb 1.00 • —
Powd., cs. lb 1.15 • —
Cubeb oil, cns lb 12.00 -16.00
Cumene, dms., c.l., works lb .12 • —
dms., l.c.l., works lb .14 • —
tanks, works lb .11 • —
Cumin seed, Iranian, bgs lb .21 • —
Moroccan, bgs. lb .36 • —
Turkish, bgs. lb .20 • —
Cumin seed oil, bots., cns lb 15.50 -17.00

HARSHAW

MELETEX

WATER DISPERSED DRIERS FOR WATER DISPERSED PAINTS

Completely free of volatile solvents
uniform and stable water dispersions
of very finely divided Metal Naphthenates
MELETEX Driers
exceedingly effective and readily used
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MELETEX LEAD 20%*
MELETEX MANGANESE 5%*

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HASTINGS-ON-HUDSON, N. Y. • PHILADELPHIA • PITTSBURGH

Cyanamide, fertilizer, mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract, ton 57.00 - —
Fertilizer, pulv., 21% N, bgs., works unit-ton 2.85 - —
Cyanamide, fertilizer, indust. grade, bgs, c.l., works ton 75.00 - —
bgs., l.c.l., works ton 96.00 - —
Indust. grade 6-16 mesh, dms., c.l., works ton 120.00 - —
dms., l.c.l., works ton 140.00 - —
Cyclohexane, 99%, tech., dms., c.l., dlvd. E of Rockies gal 1.02 - —
dms. l.c.l. same basis gal 1.10 - —
dms., c.l. dlvd W of Rockies gal .77 - —
dms., l.c.l., same basis gal .83 - —
tanks, works gal .55 - —
98% tech. 40-dm. lots or more, f.o.b works gal .56 - —
5-39 dms. same basis gal .60 - —
tanks, same basis gal .36 - —
Cyclohexanol, tech., dms., c.l., works, frt alld E lb .28½- —
dms., l.c.l. works same basis, lb .29½- —
tanks, works, same basis lb .26 - —
Cyclohexanone, tech., dms., c.l., works lb .33½- —
dms., l.c.l. works lb .34½- —
tanks, works lb .31 - —
Cyclohexylamine, tech., dms., c.l., works lb .40 - —
dms., l.c.l., works lb .50 - —
tanks, works lb .47 - —
Cypress oil, bots. lb 5.30 - —

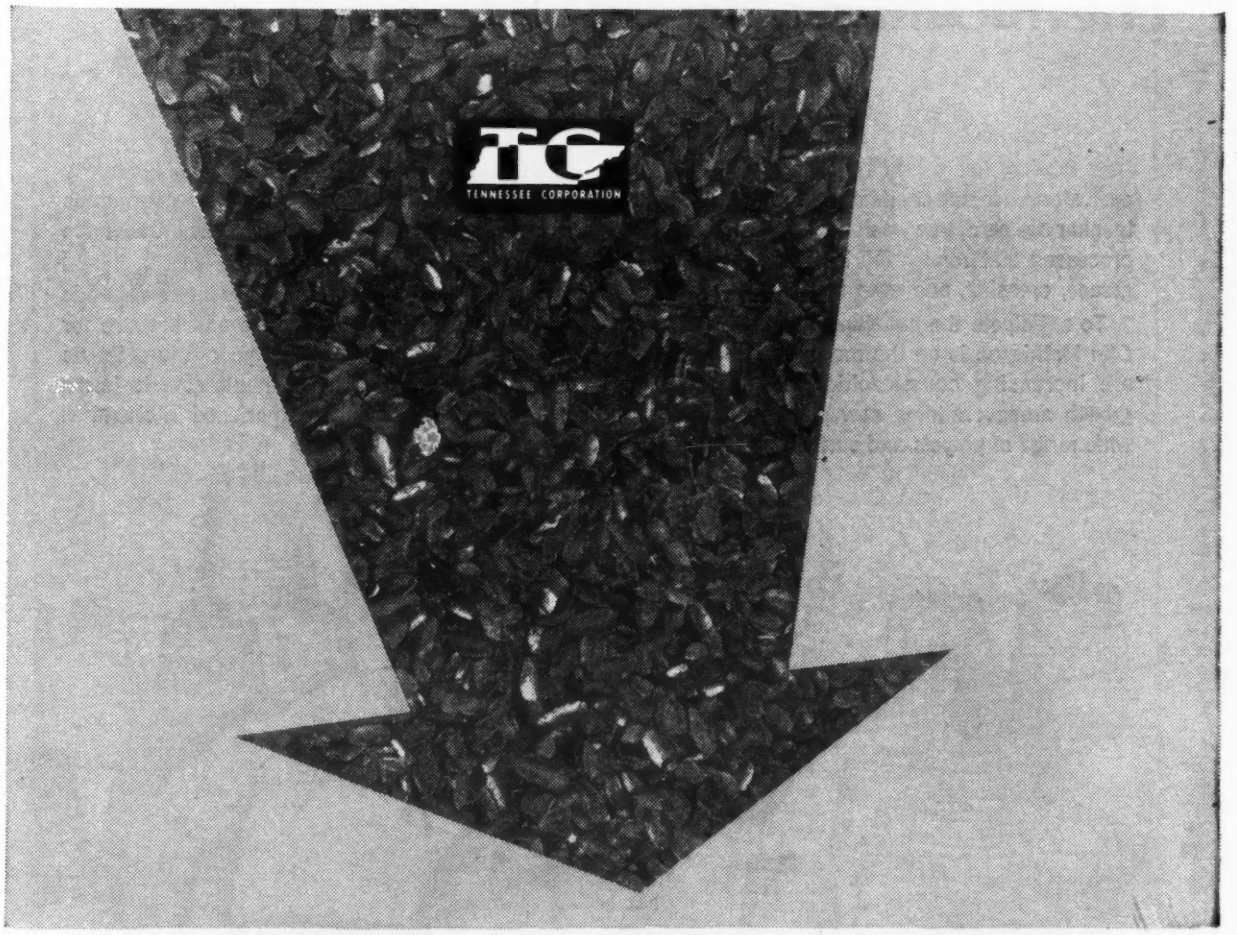
D

2,4-D, tech., bgs. dms., c.l., works, frt. equald lb .40 - —
bgs., dms., l.c.l., same basis lb .45 - .49
2,4-D butyl ester, dms. c.l., works, lb .43 - —
dms., l.c.l., same basis lb .48 - .52
tanks, same basis lb .42 - —
2,4-D isopropyl ester, dms., c.l., works lb .43 - —
dms., l.c.l., works lb .48 - .52
tanks, works lb .42 - —
Dammar gum Batavia, A E. cs lb No stocks.
East India, Batu, bold, bgs lb .15½- .18
nubs and chips bgs. lb .09 - .10
black, bold, bgs. lb .15½- .18
nubs and chips, bgs. lb .12¼- .13½
unscraped, bgs. lb .13 - .14½
pale, chips, bgs. lb .15 - .17
pale, nubs, bgs. lb .20¾- .24
Siam, cs. lb .31½- .34
Singapore, No. 1, bgs. lb .34 - .40
No 2, bgs. lb .29 - .32
dust, bgs. lb .18 - .20
No. 3, bgs. lb No stocks.
Dandelion root, bls. lb .35 - .40
DDD, tech., flake, grd., fib. dms., c.l., works lb .45 - .47
fib. dms., l.c.l., works lb .46 - .48
DDT, flake or lump, bgs., c.l., dlvd. lb .23 - —
bgs., smaller lots, same basis, lb .25 - —
fib. dms., c.l., same basis lb .24 - —
fib. dms., smaller lots, same basis lb .26 - —
Powdered DDT 1c. per pound higher.
DDVP (see Dimethyl dichlorovinyl phosphate).
l-Decanol, tech., dms., c.l., dlvd. E. lb .43½- —
dms., l.c.l., dlvd. E. lb .45½- —
tanks, dlvd. E. lb .41 - —
Cyclohexylamine, dms., c.l., works.
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb .23½- —
dms., l.c.l., dlvd. lb .25 - —
tanks, dlvd. lb .21 - —
Perfume grade, bots. lb 1.00 - 2.00
Decyl alcohol, normal (see l-Decanol)
Deertongue leaves, bls. lb .55 - .60
Defluorinated phosphate, feed grade, 14% P, paper bgs., c.l., t.l., Tupelo, Miss ton 57.07 - —
18% P, paper bgs., c.l., works, ton 66.25 - 71.80
19% P, paper bgs., c.l., t.l., works, Houston, Tex ton 74.35 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices.
Degras, common (15-17% free fatty acid), 400-lb. dms lb .12 - .14
Neutral (over 2% free fatty acid), 400-lb. dms lb .13 - —
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd. E. of Rockies, gal .69½- —
dms., l.c.l., same basis gal .74½- .80½
tanks, dlvd. same basis gal .53½- —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd. E. of Rockies gal .72 - —
dms., l.c.l., same basis gal .77 - .83
tanks, same basis gal .56 - —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., dlvd E. of Rockies gal .70½- —
dms., l.c.l., same basis gal .75½- .81½
tanks, same basis gal .54½- —
SD2B, dms., c.l., dlvd. E. of Rockies gal .69 - —
dms., l.c.l., same basis gal .74 - .80
tanks, same basis gal .53 - —
SD3A, dms., c.l., dlvd. E. of Rockies gal .68 - —
dms., l.c.l., same basis gal .73 - .79
tanks, same basis gal .52 - —
Denatured alcohol, ethyl, SD23A, dms., c.l., dlvd. E. of Rockies gal .70½- —
dms., l.c.l., same basis gal .75½- .81½
tanks, same basis gal .54½- —
SD23H, dms., c.l., dlvd. E. of Rockies gal .71 - —
dms., l.c.l., same basis gal .76 - .82
tanks, same basis gal .55 - —
Denatured alcohol, SD29, dms., c.l., dlvd. E. of Rockies gal .69½- —
dms., l.c.l., same basis gal .74½- .80½
tanks, same basis gal .53½- —
SD30, dms., c.l., dlvd. E. of Rockies gal .68 - —
dms., l.c.l., same basis gal .73 - .79
tanks, same basis gal .52 - —
Denatured alcohol, ethyl, SD-35A, dms., c.l., dlvd. E. of Rockies gal .71 - —
dms., l.c.l., same basis gal .76 - .82
tanks, same basis gal .55 - —
SD-40, dms., c.l., dlvd. E. of Rockies gal .70½- —
dms., l.c.l., same basis gal .75½- .81½
tanks, same basis gal .54½- —
For anhyd. alcohol on above formulas prices are 7c. per gal. higher.
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.
d-Desoxyephedrine hydrochloride, dms lb. 15.00 -17.00
dl-Desoxyephedrine hydrochloride, dms lb. 6.50 - —

Dextrin, corn, gum, paper bgs., c.l., 100 lbs 9.38 - —
paper bgs., l.c.l. 100 lbs. 9.53 - —
canary dark, paper bgs., c.l. 100 lbs. 9.22 - —
paper bgs., l.c.l. 100 lbs. 9.37 - —
indust. grade, 6-16 mesh, canary light, paper bgs., c.l. 100 lbs. 9.12 - —
paper bgs., l.c.l. 100 lbs 9.27 - —
white, paper bgs., c.l 100 lbs 8.96 - —
paper bgs. l.c.l. 100 lbs 9.11 - —
Corn dextrin in cotton bgs 15c per 100 lbs higher
Dextrose, anhyd., coml., bgs., c.l. 100 lbs. 8.65 - —
bgs. l.c.l 100 lbs. 8.80 - —
Anhyd., special, aluminum foil lined fib. dms., 200-lb. dms 100 lbs. 14.70 - —
100-lb. dms. 100 lbs. 15.20 - —
Hydrated, comi., bgs., c.l., ex whse 100 lbs 7.45 - —
bgs. c.l., ex whse 100 lbs. 7.60 - —
USP dms. lb. 19¾- —
Diacetone alcohol, acetone-free, dms. c.l., dlvd lb .15½- —
dms., l.c.l., dlvd. lb. .17 - —
tanks, dlvd. lb. .13 - —
Tech., dms., c.l., dlvd. lb. .15 - —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd lb .12½- —
Diacetyl, flavor grade, bots. lb. 4.30 4.55
Di-sec-amyl phenol, dms., c.l., works lb. .32 - —
dms., l.c.l. works lb. .33 - —
tanks, works lb. .29½- —
Di-tert-amyl phenol, dms., c.l., works lb. .32 - —
dms., l.c.l., works lb. .33 - —
tanks, works lb. .29½- —

Diallylamine, dms., c.l., dlvd. lb .98½- —
dms., l.c.l., dlvd. lb 1.00 - —
tanks, dlvd lb .96 - —
o-Dianisidine dry, tech., fib. dms. lb. 2.00 - —
Dibenzyl sebacate, dms., c.l., works. lb. .93 - —
dms., l.c.l., same basis lb. .94 - —
tanks, same basis lb .91 - —
Dibromobenzene, bgs., 500-lb. lots, lb. .55 - —
2,6-Di-tert-butyl-p-cresol, teed grade, c.l., t.l., dms., dlvd. lb. .65 - —
l.t.l., dms., same basis lb. .68 - —
Food grade, c.l., t.l., dms., dlvd. lb .55 - —
dms., l.t.l., same basis lb. .68 - 1.10
Tech., dms., c.l., t.l., dlvd. lb .57 - —
dms., l.c.l., same basis lb .60 - —
tanks, same basis lb. .54 - —
Dibutyl fumarate, dms., c.l., t.l., dlvd. E lb. .31½- —
dms., l.c.l., l.t.l., dlvd. E lb. .33 - —
tanks, dlvd E lb. .29 - —
Dibutyl maleate, dms., c.l., t.l., dlvd. E lb. .31½- —
dms., l.c.l., l.t.l., dlvd. E lb. .33 - —
tanks, dlvd. E lb. .29 - —
Dibutyl phthalate, dms., c.l., dlvd. E lb. .31 - —
dms., l.c.l., same basis lb. .32½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —

Dibutyl sebacate, dms., c.l., works. lb .67¼ —
dms., l.c.l., works lb. .68½ —
tanks, works lb. .65½- —
Dibutyl tartrate, dms., works, frt. alld lb 65½ —
Dibutylamine, dms., c.l., dlvd lb 55½- —
dms., l.c.l., same basis lb 57 —
tanks, same basis lb 53 —
Dicapryl phthalate, dms., c.l., dlvd. lb .27½- —
dms., l.c.l., dlvd. lb .29 - —
tanks, dlvd. lb .25 - —
Dicapryl sebacate, dms., c.l., works. lb. .63 —
dms., l.c.l., works lb .63½- .64
tanks, works lb. .61 - —
2,5-Dichloroaniline, dms., works lb. .83 - —
3,4-Dichloroaniline, tech., solid, tanks, frt alld lb. 73 - —
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¾- —
dms., l.c.l., same basis lb .13¾- —
tanks, same basis lb. .11 - —
p-Dichlorobenzene, dms., c.l., f.o.b., works, frt. alld. E lb. .12 - —
dms. 2,000 lbs. or more same basis lb. .14½- —
1,4-Dichlorobutane, dms., c.l., or t.l., works lb. .33½- —
dms., l.c.l., or l.t.l., works lb. .34 - —
tanks, works lb. .32 - —
Dichlorodiphenyltrichloroethane (see DDT).



COPPER SULFATE

Tennessee Copper Sulfate is available in powdered form as well as large, medium, industrial, granular and snow crystals.

Our basic position in Copper and our technical experience in Copper Chemicals is your assurance of highest quality and uniform consistency.

Let us send you complete information on TC Copper products.

For complete listing of our products see our inserts in CHEMICAL WEEK BUYERS' GUIDE, Pages 173-176 or CHEMICAL MATERIALS CATALOG, Pages 551-554.

TC TENNESSEE CORPORATION
TENNESSEE CORPORATION
612-629 GRANT BUILDING, ATLANTA 3, GEORGIA

2-2-Dichloroethyl Ether—Diphenyl Phthalate

2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd. E lb. .15½- —
dms., l.c.l., t.t.l., same basis lb. .17 - —
tanks same basis lb. .13 - —
Dichloroisocyanuric acid, dms., c.l., t.l. frt. equald lb. .65 - —
dms., l.c.l., same basis lb. .75 - —
Dichloropentanes dist., dms., c.l., works lb. .05 - —
dms., l.c.l., works lb. .06 - —
tanks works lb. .03 - —
Dichlorophenoxyacetic acid (see 2,4-D).
Dicyclohexylamine dms. c.l., works. lb. .54 - —
dms., l.c.l., works lb. .55 - —
tanks, works lb. .52 - —
Dicyclohexyl phthalate, gran., fib. dms c.l. works frt alld. lb. 46½- —
fib dms., l.c.l. same basis lb 48 - —
Dicyclopentadiene, dms. c.l., t.o.b. works lb. 14½- —
dms., l.c.l., same basis lb. 14¾- —
tanks same basis lb. .12 - —
Didecyl phthalate dms. c.l., works. lb. 28½- —
dms., l.c.l., same basis lb 30 - —
tankcars tanktrucks, 2,000 gals. lb .26 - —
tanktrucks 1,000-1,999 gals, same basis lb 26½- —
Dieldrin, dms., c.l. dlvd. lb 1.85 - —
dms., l.c.l. dlvd. lb 1.90 - —
Diethanolamine, dms., c.l., dlvd. E. lb .27 - —
dms., l.c.l., same basis lb .28½- —
tanks, same basis lb. .24½- —

Diethanolamine lauryl sulfate, dms., c.l., frt. alld lb. .27½- —
dms., l.c.l., frt. alld. lb. .28½- —
tanks, frt. alld. lb. .26½- —
Diethyl barbituric acid (see Barbital).
Diethyl carbonate dms. c.l., t.o.b. works lb. .47½- —
dms., l.c.l., same basis lb. .48½- —
tanks, same basis lb. .45 - —
Diethyl ethanolamines, dms., c.l., dlvd lb. .69½- —
dms., l.c.l., dlvd. lb. .71 - —
tanks, dlvd. lb. .67 - —
Diethyl oxalate, dms., c.l., t.o.b. works lb. .42½- —
dms., l.c.l., same basis lb .43½- —
tanks, same basis lb. .40 - —
Diethyl phthalate, dms., c.l., dlvd. lb. .27½- —
dms., l.c.l., dlvd. lb. .29 - —
tanktrucks, 1,000-1,999 gals, same basis lb. .26½- —
tankcars, tanktrucks, 2,000-lb. lots, same basis lb .26 - —
Diethyl sulfate, dms., c.l., works lb. .19½- —
dms., l.c.l., works lb. .20¼- —
tanks, works lb. .17½- —
Diethyl thiourea, dms., c.l., t.l., works lb .58 - —
dms., l.c.l., same basis lb. .59 - —
Diethyl toluamide, 90-95% meta isomer dms. c.l., t.l., works. lb 2.30 - —
5-44 dm. lots, works lb 2.35 - —
1-4 dm. lots, works lb 2.40 - —
N,N-Diethyl-m-toluidine, tech., liq., tanks, frt. alld lb. .83 - —

Diethylamine, dms., c.l., dlvd. E. lb. .22 - —
dms., l.c.l., same basis lb. .53½- —
tanks, same basis lb. .49½- —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .57 - —
dms., l.c.l., same basis lb. .58 - —
tanks, same basis lb. .55 - —
Diethylbenzene, dms., t.l., Zone 1, frt. alld. lb. .17½- —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Di-2-ethylhexyl phthalate (see Dioctyl phthalate).
Diethylene glycol dms. c.l., dlvd E. lb. .17¾- —
dms., l.c.l., same basis lb. .19¼- —
tanks, same basis lb. .15¼- —
Diethylene glycol diethyl ether, dms., c.l., works lb. .51½- —
dms., l.c.l., works lb. .52¼- —
Diethylene glycol monobutyl ether, c.l., dms., works lb. .30¾- —
dms., l.c.l., works lb. .32¼- —
tanks, dlvd E. lb. .28¼- —
Diethylene glycol monobutyl ether acetate, dms., c.l., works. lb. .30¾- —
dms., l.c.l., works lb. .31½- —
tanks, dlvd E. lb. .28¾- —
Diethylene glycol monoethyl ether, dms., c.l., dlvd lb. .22½- —
dms., l.c.l., dlvd. lb. .24 - —
tanks, dlvd E. lb. .20 - —
Diethylene glycol monoethyl ether acetate, dms., c.l., works. lb. .27¼- —
dms., l.c.l., works lb. .28 - —
tanks, works lb. .25¼- —
Diethylene glycol monomethyl ether, dms., c.l., dlvd lb. .21 - —
dms., l.c.l., dlvd. lb. .22½- —
tanks, dlvd E. lb. .18½- —
Diethylenetriamine, dms., c.l., dlvd. E lb. .44 - —
dms., l.c.l., dlvd. E lb. .45½- —
tanks, dlvd. E. lb. .41½- —

Diethylstilbesterol, USP, bots., 10-kilo lots kilo. 100.00 - 147.50
bots, 1-kilo lot kilo. 110.00 - 152.50
Digitalis leaves, USP, dom., dms lb. 1.25 —
Digitoxin, USP bots. gram 4.20 - —
Diglycol laurate, dms. lb. .32¼- .34
Diglycol stearate, dms., ton lots lb. .26 - .28
Diglycollic acid, bgs., c.l., t.l., works. lb. .15½- —
bgs., l.c.l., works lb. .16 - —
Dihexyl sebacate dms., c.l., works. lb. .66 - —
dms., l.c.l., works lb. .67 - —
tanks, works lb. .64 - —
Dihydrazine sulfate, dms., works lb. 1.10 1.25
Dihydrostreptomycin sulfate, bulk. gram. .032 - .035
1,2-Dihydroxy anthraquinone, dms., works lb 3.45 - —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 - —
Tech., dms., 20,000 lbs or more lb 1.11 - —
dms., 1,050 lbs to 20,000 lbs. lb 1.13 - —
dms., 150 lbs to 1,050 lbs lb. 1.15 - —
Di-isobutyl ketone, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd lb. .14½- —
Di-isobutyl phthalate, dms., c.l., dlvd E. lb. .31½- —
dms., l.c.l., same basis lb. .32½- —
tanks, same basis lb. .29 - —
Di-isobutylene dms. c.l., dlvd. E lb. .10 - —
dms., l.c.l., dlvd E lb. .11½- —
tanks, dlvd E. lb .08 - —
Di-iso-octyl phthalate, dms., c.l., dlvd lb. .28½- —
dms. l.c.l., same basis lb .30 - —
tanktrucks, 1,000-1,999 gals., dlvd. lb. .26½- —
tankcars, tanktrucks, 2,000 gals., dlvd lb. .26 - —
Di-iso-octyl sebacate, dms., c.l., works lb. .62 - —
dms., l.c.l., works lb. .62½- .63
tanks, works lb. .60 - —
Di-isopropanolamine, dms., c.l., dlvd. lb. .23¼- —
dms., l.c.l., same basis lb. .24¾- —
tanks, same basis lb. .20¾- —
Di-isopropylamine dms., c.l., dlvd. E. of Rockies lb. .50½- —
dms., l.c.l., same besis lb. .52 - —
tanks, same basis lb. .48 - —
Dillweed oil, dom., bots., dms lb. 3.75 - 4.80
Dimethyl anthranilate, cns. lb. 4.15 —
Dimethyl dichlorovinyl phosphate, 55-gal. dms., dlvd lb. 3.50 —
Dimethyl ethanolamines, anhyd., dms., c.l. dlvd lb. 1.225 - —
dms., l.c.l., dlvd. lb. 1.235 - —
tanks, dlvd. lb. 1.20 - —
70% dms., c.l., dlvd., 100% basis, contained amines lb. .68½- —
dms., l.c.l., dlvd., 100% basis. lb. .69½- —
tanks, dlvd., 100% basis lb. .66 - —
Dimethyl hydroquinone, dms. lb. 1.90 2.20
Dimethyl phthalate, dms., c.l., works lb. .28½- —
dms., l.c.l., works lb. .30 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26 - —
Dimethyl sebacate, dms., c.l., works. lb. 1.31 - —
dms., l.c.l., works lb. 1.30 - —
tanks, works lb. 1.28 - —
Dimethyl sulfate, ret. dms., c.l., works lb. .17½- —
ret. dms., l.c.l., works lb. .18½- —
tanks, works lb. .16½- —
Dimethyl sulfide, dms., c.l., works. lb. .18 - —
dms., l.c.l., works lb. .18½- —
tanks, works lb. .15 - —
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis lb. .38 - —
dms., l.c.l., frt. equald, 100% basis lb. .38½- —
tanks, frt. equald, 100% basis. lb. .28 - —
40% soln., dms., c.l., frt. equald, 100% basis lb. .35 - —
dms., l.c.l., frt. equald, 100% basis lb. .35½- —
tanks, frt. equald, 100% basis. lb. .28 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .28 - —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .26 - —
N,N-Dimethylformamide, dms., c.l., t.l., works lb. .32½- —
dms., l.c.l., works lb. .33 - .34
tanks, works lb. .30 - —
2,4-Dinitroaniline, dms., frt. alld lb. .75 - —
Dinitroaniline orange toner, CP, bbls., dlvd. E. of Rockies. lb. 1.56 - —

Dinitroaniline orange toner prices 1c higher W. of Rockies.

m-Dinitrobenzene, 89°C., dms. lb. .26 - —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E lb. .17¼- —
dms., l.c.l., frt. alld. E. lb. .17¾- —
tanks, frt. alld. E. lb. .17 - —
2,4-Dinitrophenol bbls. lb. .41 - —
2,4-Dinitrotoluene, oil, dms. lb. .11 - —
Refd., 63°C., dms. lb. .23 - —
Dioctyl adipate, dms., c.l., works lb. .42½- —
dms., l.c.l., works lb. .43½- —
tanks, works lb. .40 - —
Dioctyl phthalate, dms., c.l., frt. alld lb. 28½- —
dms., l.c.l., frt. alld lb. .30 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26 - —
Dioctyl sebacate, dms., c.l., works. lb. .61¼- —
dms., l.c.l., works lb. .62¼- —
dms., l.c.l., works lb. .62¼ —
tanks, works, dlvd. lb. .59¼- —
1,4-Dioxane, dms., c.l., dlvd. E lb. .31½- —
dms., l.c.l., dlvd. E lb. .33 - —
tanks, dlvd. E. lb. .29 - —

Prices in the west are 2c. per lb. higher.

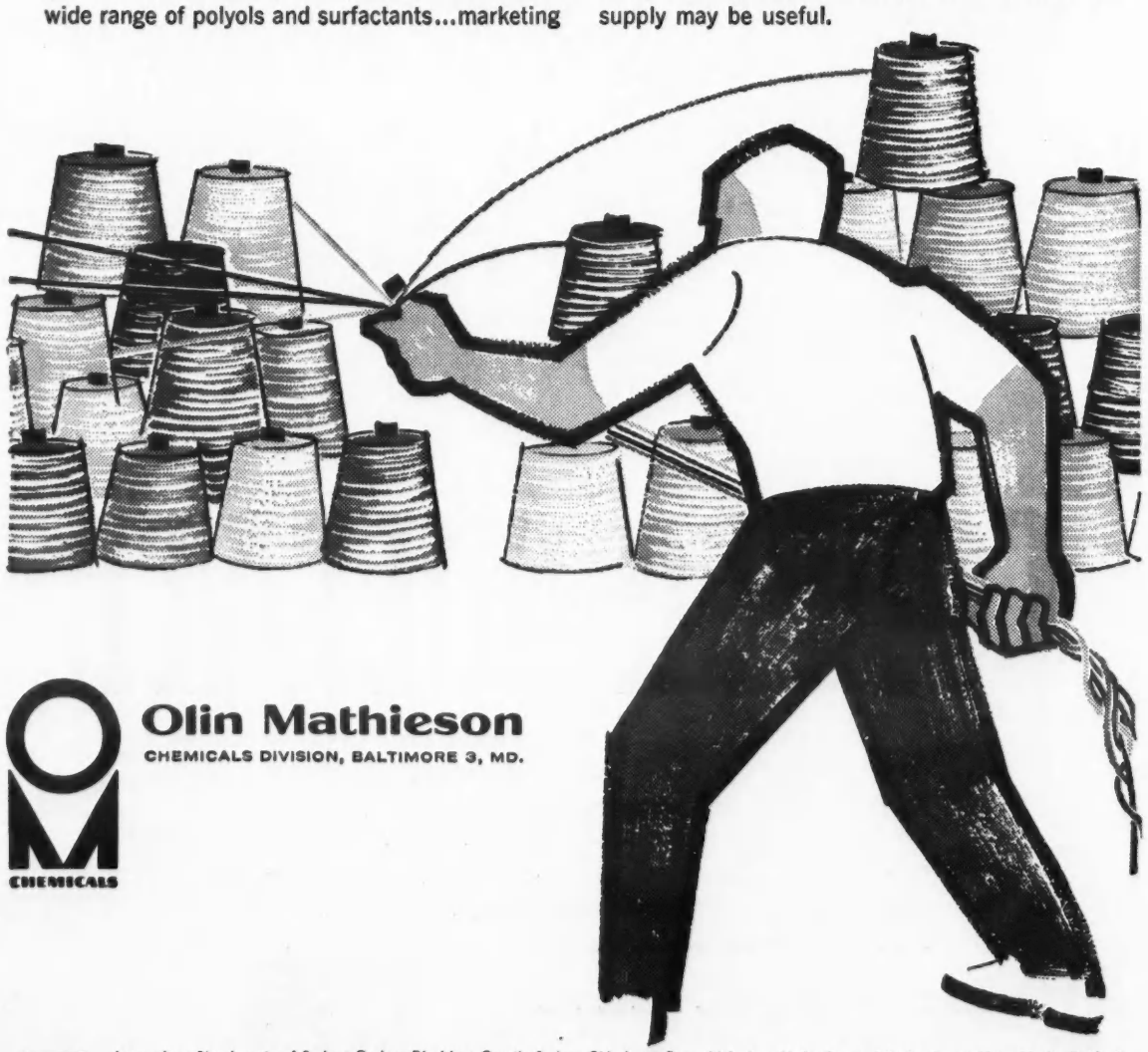
Dipentaerythritol, bgs., c.l., t.l., dlvd. E lb. .34 - —
bgs., l.c.l., l.t.l., dlvd. E lb. .35 - —
Dipentene, dest.-dist., dms., c.l., works gal. .58 - —
dms., l.c.l., works lb. .62 - —
dms., l.c.l., ex whse. gal. .78 - —
tankscars, works gal. .41 - —
Steam dist., dms., c.l., works, South gal. .72 - —
dms., l.c.l., dlvd. New York gal. .91 - —
tanks, works, South lb. .55 - —
Dip oil (see Tar acid oil).
Diphenolic acid, 1,000-lb. or more, bgs., works lb. .75 - —
Diphenolic polyether acids, 1,000-lb. or more, bgs., works lb. 1.00 - —
Diphenyl, bgs., c.l., t.l., works lb. .16¾- —
bgs., l.c.l., works lb. .18½- —
tanks, works lb. .15¾- —
Diphenyl oxide, perfume grade, cns. lb. .55 .70
Diphenyl phthalate, dms., c.l., works. lb. .51¾- —
dms., l.c.l., works lb. .53¾- —

chemicals on the move... in textiles

New fabrics, fibers and finishes are better than ever. Modern textile chemistry has created stronger, tougher tire cord, true wash-and-wear clothing, and processes that render fabrics resistant to water, grease, creasing, and even bacteria.

To anticipate the constant progress in textiles, Olin Mathieson is on the move. To keep pace we are increasing caustic/chlorine production in growth areas... adding new plant facilities for a wide range of polyols and surfactants... marketing urea of outstanding quality from a new high-purity process. Current research on a new continuous bleaching process promises a significant advance in this basic operation.

Change is the challenge, and the future depends on the ability to predict change and prepare for it. As a step in providing for your future let us review your chemical requirements now. In terms of future—or present—our experience in chemical supply may be useful.



Olin Mathieson
CHEMICALS DIVISION, BALTIMORE 3, MD.

CHEMICALS

MATHIESON: Ammonia • Bicarbonate of Soda • Carbon Dioxide • Caustic Soda • Chlorine • Formaldehyde • Hydrazine and Derivatives • Hypochlorite Products Methanol • Muriatic Acid • Nitrate of Soda • Nitric Acid • Soda Ash • Sodium Chlorite Products • Sodium Methylate • Sulfur (Processed) Sulfuric Acid • Urea • Ethylene Oxide • Ethylene Glycols • Polyethylene Glycols • Propylene Oxide • Propylene Glycol • Polypropylene Glycol Propylene Dichloride • Ethanolamines • Glycol Ethers • Surfactants • Ethylene Dichloride

BLOCKSON: Trisodium Phosphate • Trisodium Phosphate Chlorinated • Sodium Tripolyphosphate • Tetrasodium Pyrophosphate • Sodium Hexametaphosphate Monosodium Phosphate • Disodium Phosphate • Sodium Acid Pyrophosphate • Tetrapotassium Pyrophosphate • Sulfuric Acid • Hydrofluoric Acid Sodium Silicofluoride • Sodium Fluoride • Teox® 120 Surfactant

Diphenylamine, refd., flake, bgs., c.l., works, frt. equald	lb.	.32	—
bgs., l.c.l., same basis	lb.	.34	—
Refd., fused, tanks, same basis	lb.	.29	—
Refd., diphenylamine in dms., ½c. per lb. higher.			
Diphenylguanadine bgs., dms., ton lots, frt. alld	lb.	.49	—
bgs., smaller lots frt. alld	lb.	.50	—
Diphenylhydantoin-sodium, USP, dms	lb.	5.00	5.60
Dipropylene glycol, dms., c.l., frt. alld	lb.	.17	—
dms., l.c.l., frt. alld.	lb.	.18½	—
tanks, frt. alld.	lb.	.14¼	—
Dipropylene glycol methyl ether, dms., c.l., divd. E	lb.	.20	—
dms., l.c.l., same basis	lb.	.21½	—
tanks, same basis	lb.	.18½	—
Dithiodibenzoic acid, dms., 1,000-lb. lots, works	lb.	1.45	—
Di-o-tolylguanidine dms., ton lots, frt. alld	lb.	.69	—
dms., smaller lots, frt alld	lb.	.70	—
Di-o tolylthiourea, tech., solid, dms., c.l., t.l., frt alld	lb.	.55	—
Divinylbenzene, 20-25%, dms., c.l., works, frt equald	lb.	.20	—
dms., l.c.l., same basis	lb.	.21	—
tanks, same basis	lb.	.19	—
50-60%, dms. c.l., works, 100% basis	lb.	1.00	—
dms., l.c.l., works, 100% basis.	lb.	1.05	—
tanks, same basis	lb.	.90	—
Dodecenyl succinic anhydride, dms., c.l., t.l., divd. E	lb.	.75	—
dms. l.c.l., t.l., same basis	lb.	.76	—
Dodecylbenzene, dms., c.l., f.o.b., works, frt equald	lb.	.134	—
dms. l.c.l. same basis	lb	.144	—
tanks, same basis	lb.	.11½	—
Dodecylphenol, c.l., frt. alld	lb.	.22½	—
dms., l.c.l., same basis	lb.	.23½	—
tanks, same basis	lb.	.20	—
Dodecylphenol prices on shipments to Western States are 2c. per pound higher.			

Dyes, coaltar certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, divd.:

Blue, FD&C, No. 1	lb.	15.65	17.60
No. 2	lb.	15.65	17.60
Green, FD&C, No. 1	lb.	15.65	17.60
No. 2	lb.	19.60	22.85
No. 3	lb.	31.30	35.90
Red, FD&C, No. 1	lb	5.90	7.85
No. 2	lb	3.30	4.10
No. 3	lb.	19.60	22.85
No. 4	lb	5.55	7.50

Dyes, coaltar, certified colors for drugs and cosmetics 500-lb. and 1-lb. lots, divd:

Violet, FD&C, No. 1	lb.	15 65	17.60
Yellow, FD&C, No. 1	lb.	9.15	11.05
No 5	lb	3.30	4.10
No 6	lb	3.30	4.10

Dyes, coaltar certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, divd.:

Black, D&C, No. 1	lb.	10.50	10.95
Brown, D&C, No. 1	lb.	15.65	16.10
Green, D&C, No. 5	lb.	15.65	16.10
No 6	lb.	15.65	16.10
No 7	lb.	14.35	14.80
Orange, D&C, No. 3	lb	10.50	10.95
No. 4	lb.	19.60	20.05
No 5	lb	3.80	4.25
Red, D&C, No. 17	lb.	10.50	10.95
No. 18	lb.	23.60	24.00
No 19	lb.	15.00	15.45
No. 21	lb	3.90	4.35
No. 22	lb	10.50	10.95
No 28	lb.	24.15	24.65
No 33	lb.	17.00	17.45
Violet, D&C, No. 2	lb.	15.65	16.10
Yellow, D&C, No. 7	lb.	10.50	10.95
No 8	lb.	10.50	10.95
No. 10	lb	13.05	13.50
No 11	lb.	13.05	13.50

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb and 1-lb. lots, divd.:

Blue, Ext., D&C, No. 1	lb.	15.65	16.10
Green, Ext., D&C, No 1	lb.	15.65	16.10
Red, Ext., D&C, No. 1	lb.	13.05	13.50
Yellow, Ext. D&C, No 1	lb.	10.50	10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Color Index scale or prototype), contract divd. No.

11110	Brilliant scarlet BN	lb.	1.79	—
13390	Fast blue SR	lb.	1.43	—
14025	Yellow 2G	lb.	1.26	—
14030	Orange R, extra, conc.	lb.	1.64	—
14645	Chrome black T	lb.	.77	—
14720	Rubine XX, conc.	lb.	1.59	—
15510	Orange Y, extra conc.	lb.	.83	—
15575	Orange RR	lb.	.99	—
15620	Fast Red A, conc	lb.	1.61	—
15705	Chrome blue black R, conc.	lb.	1.12	—
16150	Scarlet 2RL	lb.	1.22	—
16255	Brilliant scarlet 3RN, conc.	lb.	1.26	—
16230	Fast light, orange 2G	lb.	1.39	—
17590	Brown PG	lb.	3.00	—
18050	Phloxine 2G	lb.	1.05	—
18055	Fuchsine 6B	lb.	1.55	—
18965	Fast yellow 2G	lb.	2.32	—
19140	Yellow XX	lb.	2.48	—
19555	Yellow NN, conc.	lb.	3.67	—
20170	Brown Y	lb.	1.53	—
20470	Blue black, extra, conc	lb.	1.44	—
21010	Brown, RX, conc.	lb.	1.35	—
22240	Scarlet B	lb.	2.81	—
22310	Red FC	lb.	1.57	—
22311	Brown MCW	lb.	1.47	—
22610	Blue 2B, extra conc.	lb.	1.53	—
23500	Red 4BX, conc.	lb.	1.80	—
24410	Sky blue FF, extra, conc.	lb.	1.95	—
24895	Brilliant yellow, conc.	lb.	3.27	—
26360	Navy blue 3R, conc.	lb.	1.84	—
26695	Black F, conc.	lb.	2.30	—
26900	Milling Red 3R, conc	lb.	2.24	—
27075	Neutral black 2B, conc	lb.	2.75	—
27720	Gray L	lb.	2.18	—
29185	Fast scarlet 4BNC	lb.	2.23	—
30015	Diazo black VJ conc.	lb.	2.48	—
30045	Yellow brown K, extra	lb.	1.26	—
30235	Black EB, 200%	lb.	1.53	—
30295	Green BY, conc.	lb.	1.07	—
35660	Brown B	lb.	2.89	—
37565	Naphthol SWF	lb.	1.85	—
40000	Yellow 2G	lb.	1.44	—
41000	Yellow OX	lb.	2.45	—
42000	Green V, crystals	lb.	2.73	—
42040	Brilliant green G crystals	lb.	3.62	—
42090	Blue EG	lb.	1.85	—
42100	Milling green 6B, conc.	lb.	4.78	—
42640	Violet 4BXN	lb.	2.43	—
43820	Brilliant blue, BBG	lb.	2.44	—
44045	Blue B, extra conc.	lb.	3.61	—
45170	Red BX	lb.	4.76	—
50415	Nigrosine SSJ	lb.	1.03	—
52015	Blue GXX	lb.	2.33	—
58005	Alizarin red SC	lb.	3.64	—
59700	Golden orange GFD, single paste	lb.	2.70	—
59710	Flaming orange 6RD double powder	lb.	4.90	—
59800	Dark blue BO, single paste.	lb.	2.28	—
59825	Jade green NC supra, double paste	lb.	1.50	—
61570	Alizarin green CG, extra	lb.	3.81	—
63010	Alizarin blue SAPG	lb.	3.90	—
63615	Alizarin blue black B	lb.	3.26	—
69825	Blue BLFD double paste	lb.	2.82	—
70800	Brown BR single paste	lb.	2.03	—

Dyes, coaltar oil-soluble, 100-lb. drums, divd.

No.				
12140	Oil scarlet 8L	lb	1.87	—
12055	Oil orange 7078 V	lb.	1.38	—
26120	Oil red N 1700	lb	1.94	—
42535B	Methyl violet base	lb	1.88	—
44045B	Victoria blue base	lb	4.06	—
50415B	Oil black 8603	lb.	.80	—
61565	Alizarin cyanine green base.	lb	6.13	—
	Spirit black RB	lb.	3.89	—
	Spirit brown GN	lb	5.30	—
	Spirit orange R conc.	lb	5.87	—
	Spirit red B conc	lb.	6.41	—
Pr. 517	Spirit yellow 2R conc	lb	4.62	—
Pr. 554	Spirit blue THN	lb.	5.06	—

E

Echinacea root, bls.	lb	1.25	—
Elm bark, grinding, bls.	lb.	.30	.32
Powd., bbls., bxs	lb.	.60	—
Select, bundles	lb.	.75	—
Emetine hydrochloride, USP, bots.	oz.	48.40	—
Endrin, tech, dms., 100-lbs or more, 100% basis, divd	lb.	2.70	—
Eosin red toner, bbls, works	lb.	1.95	—
Ephedrine syn., USP, anhyd., bots. 100-oz lots	oz.	.98	1.00
hydrous, bots., 100-oz. lots	oz.	.92	—
Ephedrine hydrochloride, NF, dms., 100-oz. f.o.b. works	oz.	.72	—
Ephedrine sulfate, USP, cryst., dms., 100-oz. f.o.b works	oz.	.73	—
USP, powd., dms., 100-oz., same basis	oz.	.73	—
Epichlorohydrin, dms., c.l., divd	lb.	.29½	—
dms., l.c.l., divd.	lb.	.31	—
tanks, divd.	lb.	.27	—
l-Epinephrine base, syn., USP, bots., 100 gram lots	gram.	.58	—
Epsom salt (see Magnesium sulfate).			
Erigeron oil, ens.	lb	11 00	—
Ergot, NF, dms., tin-lined	lb.	2.00	—
Eserine salicylate, bots.	oz.	44.00	—
Eserine sulfate, bots.	oz.	86.00	—
Ester gum, gum-rosin type, dms., c.l., divd., Ill., Md., Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W Va	lb.	.18½	—
Wood-rosin type, dms., c.l., same basis	lb.	.18½	—
Ether (see specific product).			
Ethyl acetate nat., terment, 85-88%, dms., c.l., divd	lb.	.15	—
dms., l.c.l., divd.	lb.	.16½	—
tanks, divd	lb.	.12½	—
95-98%, dms., c.l., divd.	lb.	.15¼	—
dms., l.c.l., divd.	lb	16¾	—
tanks, divd.	lb.	.12¾	—
Ethyl acetate, nat., ferment, 99%, dms., c.l., divd	lb.	.15½	—
dms., l.c.l., divd.	lb.	.17	—
tanks, divd.	lb.	.13	—
syn., 85-88%, dms., c.l., divd	lb.	.15	—
dms., l.c.l., divd.	lb.	.16½	—
tanks, divd.	lb.	.12½	—
Ethyl acetate, syn., 95-98%, dms., c.l., divd	lb.	.15¼	—
dms., l.c.l., divd	lb.	.16¾	—
tanks, divd	lb.	.12¾	—
99%, dms., c.l., divd.	lb.	.15½	—
dms., l.c.l., divd.	lb.	.17	—
tanks divd.	lb.	.13	—
Ethyl acetoacetate, dms., c.l., divd.	lb	58½	—
dms., l.c.l., divd.	lb	60	—
tanks, divd	lb	56	—
Ethyl acrylate, dms., c.l., t.l., divd	lb	36	—
dms., t.t.l., divd.	lb	37	—
tanks, divd	lb	34	—
Ethyl alcohol, 190 pf., USP, tax paid dms, c.l., divd E of Rockies	gal	20 63	—
dms., l.c.l., same basis	gal.	20 73	20 84
Ethyl alcohol, 190 pf., USP, tax-free, dms., c.l., divd E of Rockies	gal	68	—
dms., l.c.l., same basis	gal.	78	80
tanks, same basis	gal	52	—
Ethyl alcohol, absolute 200 pf., tax paid, dms, divd E of Rockies	gal	21 75	—
dms., l.c.l., same basis	gal.	21 85	21 90
tanks, same basis	gal.	21 59	—
Ethyl alcohol denatured (see Denatured alcohol, ethyl).			
Ethyl aminobenzoate USP (see Benzocaine).			
Ethyl amyl ketone dms., c.l., divd.	lb	20	—
dms. l.c.l. same basis	lb	21½	—
tanks, same basis	lb	17½	—
Ethyl benzoate, bcts.	lb	75	1 00
Ethyl bromide, tech., 98%, dms., c.l., frt. alld. E	lb	43	—
dms., l.c.l., frt. alld. E	lb.	45	—
tanks, frt. alld. E	lb.	.41	—

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Ethyl Butyl Ketone—Gelatin

Ethyl butyl ketone dms., c.l., t.l., works	lb	36	—
dms., l.c.l., t.l. works	lb	.38¾	—
tanks works	lb	34	—
Ethyl butyrate dms. works	lb	.85	1.00
Ethyl carbamate (see Urethane)			
Ethyl cellulose, viscosities 4 cps. ngs., 5,000 lb lots or more, frt alld E	lb	.73	—
ngs. smaller lots frt alld E	lb	.75	—
Viscosities 10 20 50 100, 150 cps ngs., 5,000 lb lots or more frt alld E	lb	.68	—
ngs. smaller lots frt alld E	lb	.70	—
Ethyl chloride tech. cyls. works	lb	.20	.22
dms. works	lb	.18	.20
tanks works	lb	.10	—
Ethyl cinnamate ens	lb	4.35	3.50
Ethyl ethanolamines, mixed, dms., c.l., divd E	lb	.43½	—
dms., l.c.l., divd E	lb	.44½	—
tanks divd E	lb	.41½	—
Ethyl ether absolute ACS dms	lb	.27	—
Anesthesia USP dealers, 1-lb cns	lb	1.01	—
½ lb cns	lb	1.09	—
¼ lb cns	lb	1.21	—
Indust. dms., c.l., divd	lb	.13½	—
dms., l.c.l., divd E	lb	.15	—
tanks divd E	lb	.11	—
2-Ethyl hexoic acid, dms., c.l., t.l., divd E	lb	.37	—
dms., l.c.l., t.l., divd E	lb	.38½	—
tanks, divd E	lb	.34½	—
2 Ethyl hexoic acid, 1c higher W of Rockies.			
2-Ethyl hexyl acrylate, dms., c.l., t.l., straight or mixed, frt alld E	lb	.42½	—
dms., t.l.t., same basis	lb	.43½	—
tanks same basis	lb	.40	—
Prices of 2-ethylhexyl acrylate are 1½c. per lb higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.			
2-Ethylhexyl alcohol, dms., c.l., divd	lb	.23¾	—
dms., t.c.l., divd	lb	.25¼	—
tanks divd	lb	.21¼	—
Ethyl iodide, cbys., works	lb	3.30	—
Ethyl methacrylate, dms., c.l., frt equald	lb	.52	—
dms., t.l.t., frt equald	lb	.52½	—
tanks, frt equald	lb	.50	—
Ethyl morphine hydrochloride USP	bots	oz. 11.85	—
Ethyl oenanthate, dms	lb	1.05	1.30
Ethyl oxalate (see Diethyl oxalate)			
Ethyl silicate dist. (see Tetraethyl orthosilicate).			
Ethyl silicate 40% available SiO_2, dms., c.l., divd	lb	.44½	—
dms., t.c.l., divd	lb	.46	—
tanks, divd	lb	.42	—
N-Ethyl-a-naphthylamine, dms., works	lb	1.04	—
N-Ethyl-m-toluidine tech., liq., tanks, frt alld	lb	.83	—
N-Ethyl-o-toluidine, bbls	lb	.88	—
Ethylamine (see Mono-, Di-, or Tri-)			
N-Ethylaniline dms., c.l., frt. alld	lb	.57	—
dms., t.c.l., frt alld	lb	.58	—
tanks, frt, alld	lb	.55	—
Ethylbenzene, 99% dms., c.l., t.l., frt equald	lb	.15	—
dms., t.c.l., same basis	lb	.17	—
tanks, same basis	lb	.12½	—
2-Ethylbutyl alcohol, dms., c.l., works	lb	.30	—
dms., t.c.l., works	lb	.30¾	—
tanks, works	lb	.28	—
Ethylene, contract, refy gate	lb	.0475	.0525
Ethylene dibromide dms., c.l., frt. equald	lb	.30½	—
dms., t.c.l. frt equald	lb	.31½	—
tanks, frt. equald	lb	.28½	—
Ethylene dichloride dms., c.l., divd.	lb	.11½	—
dms., t.c.l., same basis	lb	.13	—
tanks, same basis	lb	.09	—
Ethylene dichloride prices W of Rockies, 1c per lb higher			
Ethylene glycol indust., dms., c.l., divd E	lb	.16	—
dms., t.c.l., same basis	lb	.17½	—
tanks, same basis	lb	.13½	—
Ethylene glycol monobutyl ether, dms., c.l., divd E	lb	.22	—
dms., t.c.l., divd E	lb	.23½	—
tanks, divd E	lb	.19½	—
Ethylene glycol monoethyl ether, dms., c.l., divd. E	lb	.21	—
dms., t.c.l., divd. E	lb	.22½	—
tanks, divd E	lb	.18½	—
Ethylene glycol monoethyl ether acetate, dms., c.l. divd. E	lb	.19½	—
dms., t.c.l., divd E	lb	.20½	—
tanks, divd. E	lb	.17	—
Ethylene glycol monomethyl ether, dms., c.l., divd. E	lb	.21	—
dms., t.c.l., divd. E	lb	.22½	—
tanks, divd. E	lb	.18½	—
Ethylene glycol monomethyl ether acetate, dms., c.l., divd. E	lb	.29	—
dms., t.c.l., divd. E	lb	.29¾	—
tanks, divd E	lb	.27	—
Ethylene glycol monostearate, triple pressed, dms	lb	.33	.38
Ethylene oxide, dms., c.l., divd E	lb	.21½	—
dms., t.c.l., divd E	lb	.24½	—
tanks, divd E	lb	.15½	—
Ethylene trichloride (see Trichloroethylene)			
Ethylenediamine 85-88%, dms., c.l., divd E., 100% basis	lb	.42	—
dms., t.c.l., divd E., 100% basis	lb	.43	—
tanks divd E., 100% basis	lb	.40	—
lots and over	lb	6.75	—
200-lb lots and over	lb	7.00	—
100-lb lots and smaller	lb	7.30	7.40
Ethyl vanillin, 100-lb. fib. dms., 500-lb	lb	5.65	—
less than 500-lb.	lb	6.10	—
Eucalyptol, USP, cns, dms	lb	.85	1.40
Eucalyptus oil, NF, rectified 70-75% dms	lb	.45	—
NF rectified, 80-85% dms	lb	.53	.62
Eugenol, tech, dms	lb	1.45	—
USP, dms	lb	2.00	—
Euphorbia herb, bls	lb	.12	.15

F

F salt paste, tech, dms, works	lb	2.30	—
Fennel oil, sweet, USP, cns.	lb	2.60	—
Fennel seed, Argentine, ngs	lb	.16	—
French, light, bgs	lb	.16	—
Indian, light, bgs	lb	.17½	—
Rumanian, bgs	lb	.14	—
Yugoslav light ngs	lb	.16½	—
Fenugreek seed, Moroccan, bgs	lb	.08	—
Ferric chloride, anhyd., tech., dms., c.l., works 100 lbs.		7.50	—
dms., t.c.l. works 100 lbs		8.50	—
Ferric chloride, indust., cryst., bbls., c.l., works 100 lbs.		5.25	6.75
bbls., t.c.l., works 100 lbs		5.75	7.25
42° Be., photo grade, cbys., c.l., works 100 lbs.		7.25	8.25
sewage grade, tanks, frt equald, 100% basis 100 lbs.		4.00	—
USP, cryst., dms., t.l., works	lb	.08½	—
Ferric citrate, gran., dms	lb	.86	—
Ferric hypophosphite, NF, dms	lb	3.45	—
Ferric naphthenate, liq., 6% Fe, dms., frt alld	lb	.28¼	—
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b works E	lb	.89	—
Ferric oxides (see iron oxides).			
Ferric phosphate, NF, soluble, gran pearls, cs	lb	.72	.75
Ferric pyrophosphate, NF VII, soluble, gran., pearls, dms.	lb	.70	—
Ferric resinate, 6¾% Fe., dms., ton lots, frt ald	lb	.40¼	—
Ferric stearate, dms., c.l., frt. alld.	lb	.39	—
dms., t.c.l., frt alld	lb	.40	.44
Ferric sulfate, partly hydrated, bgs., c.l., works	ton	35.25	—
bgs., t.c.l., works	ton	36.25	42.25
bulk, c.l., works	ton	33.25	—
Ferric-ammonium citrate, brown, pearls, NF, gran., dms	lb	.65	.68
Green pearls, USP XII, gran., dms	lb	.66	.69
Ferric-ammonium oxalate, fine gran., dms	lb	.27½	.29½
Ferric-potassium oxalate, fine gran., dms	lb	.32½	.34½
Ferric-sodium oxalate, fine gran., dms	lb	.27½	.29½
Ferrous gluconate, USP, 200-lb. dm., frt. equald	lb	.96	—
Ferrous sulfate, gran., bgs., c.l., works	ton	34.50	—
bgs., t.c.l., divd Metropolitan area 100 lbs.		3.35	4.25
bbls., c.l., works	ton	40.00	—
bulk, c.l., works	ton	27.00	—
USP, cryst., bbls., dms	lb	.09½	.10
Fir balsam, Canada, obls	gal	32.00	35.00
Oregon, bbls	gal	3.40	4.64
Fir oil, Canada, cns	lb	1.75	2.50
Fish oil, refd., alkali, dms.	lb	.1300	.1350
Kettle-bodied, dms.	lb	.1530	.1580
Light-pressed, dms.	lb	.1150	.1200
tanks	lb	.10	—
Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram, dms 1,000,000 units.		.12	—
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic and Gulf coasts	ton	92.00	—
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic and Gulf coasts.	ton	88.00	—
Fleaseed (see Psyllium seed).			
Folic acid, USP, bots., fib. dms., kilo lots or more gram.		.30	.44
10% feed grade, fib dms., 3 kilos or more kilo.		30.00	44.00
Formaldehyde, 37% (inhibited, 12 to 15% methanol), USP, dms., c.l., divd	lb	.0085	—
tanks, divd	lb	.0430	—
Formaldehyde, methanol-free (uninhibited), tanks, divd	lb	.0375	—
Formic acid, 85% cbys. c.l., works	lb	.1570	—
cbys., t.c.l., works	lb	.1620	.1730
90%, cbys., c.l., works	lb	.1625	—
cbys., t.c.l., works	lb	.1675	.1775
Fringetree bark, bls	lb	.65	.70
Fumaric acid, tech., 250-lb dms., c.l., frt. equald	lb	.23¼	—
dms., t.c.l., frt equald	lb	.24¾	—
Fumaric acid in bags ½c. per lb less.			
Furfural, dms. c.l. works	lb	.13	—
dms., t.c.l., works	lb	.14	—
tanks, divd E	lb	.11½	—
tanks, divd. W	lb	.12½	—
Furfuryl alcohol, cns., works	lb	.28	—
dms., c.l., t.l., Newark, N. J.	lb	.20½	—
dms., t.c.l., t.t.l., Newark N J	lb	.21½	—
dms., c.l., t.l., Memphis, Tenn	lb	.19	—
dms., t.c.l., t.t.l., Memphis, Tenn.	lb	.20	—
tanks, Memphis, Tenn	lb	.175	—
Fusel oil, refd., dms., c.l., divd	lb	.18	—
dms., t.c.l., divd.	lb	.19½	—
tanks, divd	lb	.15½	—

G

G salt, bbls., frt. alld., 100% basis	lb	.73	—
Gallic acid, NF VII, bbls., 1,000-lb. lots	lb	2.00	—
bbls., smaller lots	lb	2.02	2.22
Tech., bbls., 1,000-lb. lots	lb	1.78	—
bbls., smaller lots	lb	1.80	2.00
Gamma acid, dry grd., bbls., frt. alld	lb	1.75	—
Gammapicoline (see g-picoline).			
Garlic oil, dom., bots.	oz.	4.75	6.05
Imp., bots.	oz.	4.50	5.00
Gaultheria oil (see Wintergreen oil).			
Gelatin, edible 75 AOAC test, bbls., c.l., divd	lb	.55	—
150 AOAC test, bbls., c.l., divd.	lb	.64	—
200 AOAC test, bbls., c.l., divd.	lb	.70	—
225 AOAC test, bbls., c.l., divd.	lb	.74	—
275 AOAC test, bbls., c.l., divd.	lb	.83	—

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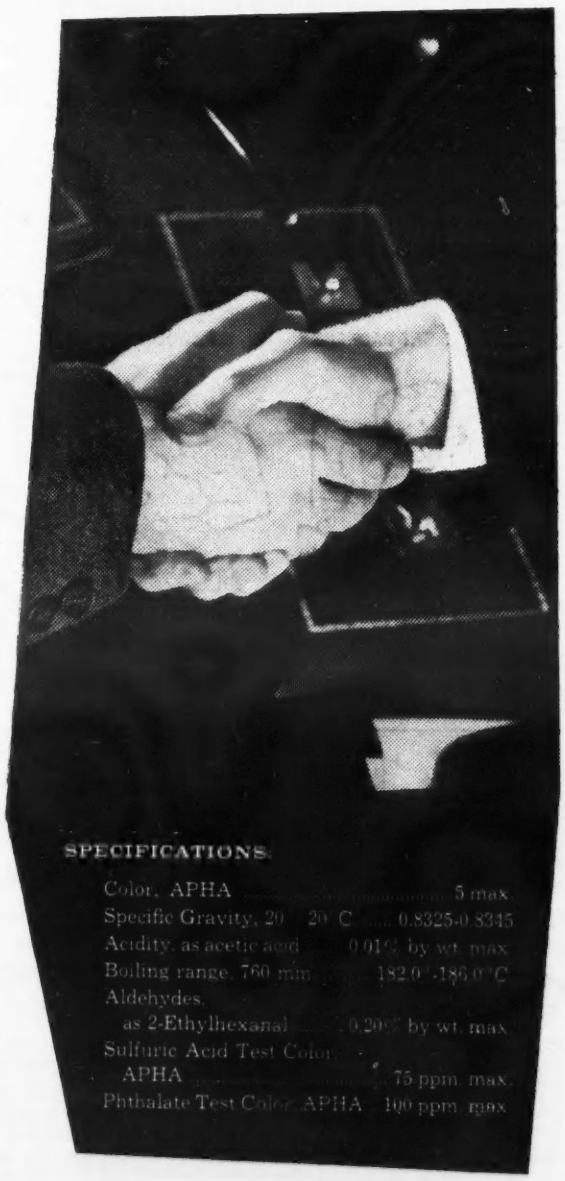
SPECIFICATIONS
Color, APHA 5 max.
Specific Gravity, 20° 20° C 0.8325-0.8345
Acidity, as acetic acid 0.01% by wt. max.
Boiling range, 760 mm 182.0°-186.0°C
Aldehydes, as 2-Ethylhexanal 0.20% by wt. max.
Sulfuric Acid Test Color, APHA 75 ppm. max.
Phthalate Test Color, APHA 100 ppm. max.

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CHEMICAL PRODUCTS, INC.
KINGSPORT, TENNESSEE
subsidiary of EASTMAN KODAK COMPANY

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tenn.; Atlanta; Boston; Buffalo; Chicago; Cincinnati; Cleveland; Detroit; Greensboro, N. C.; Houston; Kansas City, Mo.; New York; Philadelphia; St. Louis. **West Coast: Wilson & Geo. Meyer & Company,** San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

Gelsenium root, bls.	lb.	.30	.35
Gentian root, bls.	lb.	.24	—
Grd., bbls., bxs.	lb.	.30	—
Powd., bbls. bxs.	lb.	.30	—
Geraniol, extra cns., dms.	lb.	1.75	2.40
Soap grade, dms.	lb	.90	1.75
Standard, cns., dms.	lb.	1.65	—
Synthetic, dms.	lb	1.30	—
Geranium oil, Algerian, cns.	lb.	23.00	—
Bourbon, cns.	lb.	28.00	—
Geranium oil, Turkish (see Palmarosa oil).			
Geranyl acetate cns.	lb	1.90	2.70
Synthetic, dms.	lb.	1.45	—
Ginger oil, dist., bots.	lb.	11.50	14.00
Ginger oleoresin, NF, from African root, bots	lb.	4.25	5.00
NF, from Jamaican root, bots.	lb.	7.75	—
Ginger root Cochin, bgs.	lb.	.29	—
Jamaican, No. 3, bgs.	lb.	.28	—
Nigerian, split, bgs.	lb.	.20	—
Sierra Leone, bgs.	lb.	.32	—
Glauber's salt (see Sodium sulfate).			
Gluconic acid tech. 50% dms., c.l., t.l., f.o.b. works	lb.	.20	—
dms., l.c.l., f.o.b. works	lb.	.21	—
tanks, f.o.b. works	lb.	.17	—
Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd.	lb.	.16	—
131 jellygrams, bgs., c.l., same basis	lb.	.16½	—
164 jellygrams, bgs., c.l., same basis	lb.	.18½	—
191 jellygrams, bgs., c.l., same basis	lb.	.19½	—
222 jellygrams, bgs., c.l., same basis	lb.	.21	—
Glue, bone, green, 40 jellygrams, bgs., c.l., same basis	lb.	.16	—
86 jellygrams, bgs., c.l., same basis	lb.	.16	—
115 jellygrams, bgs., c.l., same basis	lb.	.16½	—
Glue, bone, green, 135 jellygrams, bgs., c.l., same basis	lb.	.17½	—
164 jellygrams, bgs., c.l., same basis	lb.	.18½	—
180 jellygrams, bgs., c.l., same basis	lb.	.19½	—
200 jellygrams, bgs., c.l., same basis	lb.	.20½	—
Bone glue, l.c.l., prices 2c. higher.			
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd.	lb.	.18	—
95-149, bgs., c.l., dlvd.	lb.	.19	—
122-149, bgs., c.l., dlvd.	lb.	.20½	—
150-177, bgs., c.l., dlvd.	lb.	.22½	—
178-206, bgs., c.l., dlvd.	lb.	.25	—
Glue, hide, 207-236, bgs., c.l., dlvd.	lb.	.28	—
237-266, bgs., c.l., dlvd.	lb.	.30½	—
267-298, bgs., c.l., dlvd.	lb.	.32½	—
299-330, bgs., c.l., dlvd.	lb.	.34½	—
331-362, bgs., c.l., dlvd.	lb.	.36½	—
363-394, bgs., c.l., dlvd.	lb.	.38	—
395-427, bgs., c.l., dlvd.	lb.	.40	—
428-460, bgs., c.l., dlvd.	lb.	.42	—
461-494, bgs., c.l., dlvd.	lb.	.44	—
495-529, bgs., c.l., dlvd.	lb.	.46	—
Hide glue, l.c.l., prices 2c. higher.			
l-Glutamic acid, 99½%, fib. dms., 100-lb. lots, frt. alld.	lb.	1.80	—
fib. dms., 25-lb. lots, frt. alld.	lb.	1.88	—
l-Glutamine, bots., 1-9 kilo lots,	kilo.	150.00	300.00
Bots., 50-kilo lots	kilo.	100.00	—
Bots., 500-kilo lots	kilo.	75.00	—
Glycerine, dom., nat., crude, saponification, 88%, tanks, dlvd.	lb.	.20	—
nat., crude, soapiye, 80%, tanks, dlvd.	lb.	.18	.18¼
nat., refd., USP, CP, 99%, dms., c.l., dlvd.	lb.	.30⅞	—
dms., l.c.l., dlvd.	lb.	.31⅝	—
tanks, dlvd.	lb.	.29⅛	—
Glycerine, dom., nat., refd., USP, CP, 96%, dms., c.l., dlvd.	lb.	.30	—
dms., l.c.l., dlvd.	lb.	.30¾	—
tanks, dlvd.	lb.	.28¼	—
nat., high gravity, dms., c.l., dlvd.	lb.	.30¾	—
dms., l.c.l., dlvd.	lb.	.31½	—
tanks, dlvd.	lb.	.29	—
Glycerine, dom., syn., dms., c.l., dlvd.	lb.	.31	—
dms., l.c.l., dlvd.	lb.	.31¾	—
tanks, dlvd.	lb.	.29¼	—
Imp., nat., crude, soapiye, 80%, c.l.f.	lb.	.17½	—
Glycine (see Aminoacetic acid).			
Glycerol (see Glycerine).			
Glycolic acid (see Hydroxyacetic acid).			
Glycolonitrile, 70%, aqueous, dms., c.l., t.l., works	lb.	.40	—
dms., l.c.l., same basis	lb.	.42	—
tanks, same basis	lb.	.39	—
Glyoxal, 30%, dms., c.l., works	lb.	.20½	—
dms., l.c.l., works	lb.	.21¼	—
tanks, works	lb.	.18	—
Golden seal root, NF, tested, bls.	lb.	3.10	—
Gramicidin, 1 to 5 kilos, f.o.b. works,	gram	4.70	—
Grapefruit oil, dms.	lb.	4.50	—
Graphite, amorp., powd., bgs., fib. dms., ex whse	lb.	.06	.09½
Cryst., 88-90%, powd., bgs., fib. dms., ex whse	lb.	.19	.21½
90-92%, powd., bgs., fib. dms., ex whse	lb.	.21	.24½
95-97%, powd., bgs., fib. dms., ex whse	lb.	.29	.31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse	lb.	.29	.31
No. 2, 90-95%, bgs., fib. dms., ex whse	lb.	.29	.31
Grease, white, choice all hog, tanks, dlvd.	lb.	.07¼	—
Yellow, tanks, dlvd.	lb.	.04¾	.04⅞
Grease oil, No. 1, dms., c.l.	lb.	.13¾	—
dms., l.c.l.	lb.	.14¾	.15¾
Extra winter, strained, dms., c.l.	lb.	.16¼	—
dms., l.c.l.	lb.	.17¼	.18¼
Prime, burning, dms., c.l.	lb.	.17¾	—
dms., l.c.l.	lb.	.18¾	.19¾

GREEN PIGMENTS

Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb, bls.	lb.	.40	—
Guaiacol, NF, cryst., dms., tins	lb.	2.10	2.15
NF, liq., cbys., dms.	lb.	2.30	2.40
Guaiacwood oil, cns.	lb.	.65	.80
Guaiacol carbonate, NF VII, dms	lb.	3.40	3.45
Guar gum, food grade, bgs., c.l.	lb.	.38	—
bgs., 5,000 lbs or more	lb.	.39	—
Indust., bgs., c.l.	lb.	.32	—
Tech grade, bgs.	lb.	.30	.33

GUMS

Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

H

H acid, dry, bbls., c.l., frt. alld., 100% basis	lb.	1.00	—
bbls., l.c.l., same basis	lb.	1.05	—
Hansa yellow, 10 G, bbls., dlvd. E. of Rockies	lb	2.48	—
Hansa G yellow, pigment, bbls.	lb.	2.20	—
Hawthorn berries, bgs.	lb.	.18	.30
Heliotropin, 100-lb lots, dms.	lb.	2.60	3.40
Hellebore root dom., green, bls	lb.	.70	.75
Helonias root, bls.	lb.	1.50	—
Hemlock oil, cns.	lb.	2.55	3.00
Henbane leaves, bls.	lb.	.40	.45
Heptachlor dms., c.l., t.l., frt. alld., 100% basis	lb.	.96	—
Heptane, indust., tankcars, New Jersey and New York gal.	gal.	.20	—
Houston, Texas	gal.	.1625	—
Hesperidin, purif., 100-lb fib. dms., f.o.b., works	lb.	8.95	—
Hesperidin methylchalcone, bots., 50-lb lots, works	lb.	22.50	—
bots., 5-lb lots, works	lb.	23.00	—
bots., 1-lb. lots, works	lb.	23.50	—
Hexachlorophene dms., 1,100 lbs. or more	lb.	1.84	—
dms., to 1,100 lbs.	lb.	1.94	—
Hexalin (see Cyclohexanol).			
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or New York City	lb.	.233	—
Hexamethylenetetramine, tech., bgs., 1,000-19,999-lb. lots, same basis	lb.	.243	—
bgs., smaller lots, same basis.	lb.	.253	—
fib. dms., 1,000-lb. lots or more, same basis	lb.	.250	—
fib dms., smaller lots, same basis	lb.	.253	—
Hexamethylenetetramine, USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York City and Philadelphia	lb.	.42½	—
bgs., smaller lots, same basis	lb.	.43½	.48⅛
Hexane, industrial, tankcars, New Jersey and New York	gal.	.20	—
Houston, Texas	gal.	.16	—
l-Hexanol, dms., c.l., works	lb.	.35	—
dms., l.c.l., works	lb.	.35¾	—
tanks, works	lb.	.33	—
Hexyl cinnamic aldehyde, dms	lb	4.00	7.50
n-Hexyl methacrylate, dms., c.l., works	lb.	.75½	—
dms., l.c.l., works	lb.	.76	—
Hexyl salicylate, dms.	lb.	1.75	—
Hexylene glycol, dms., c.l., dlvd	lb.	.17½	—
dms., l.c.l., dlvd.	lb.	.19	—
tanks, dlvd.	lb.	.15	—
Hexylresorcinol, USP, dms., 25-lb. lots or more, dlvd	lb.	14.00	—
dms., smaller lots, dlvd.	lb.	14.50	—
Homatropine hydrobromide, USP, bots.	oz.	3.25	—
Homatropine methylbromide, USP, bots	oz.	3.25	—
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton	ton	6.75	—
Horehound herb, bls.	lb.	.18	.20
Hydrastis (see Goldenseal).			
Hydrazine hydrate, 85% ret. dms., works	lb	1.35	1.55
100%, ret. dms., works	lb.	1.60	1.90
Hydriodic acid, purif., 47%, 2-cbys., f.o.b. works	lb.	2.92	—
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd, zone 1	lb.	.29¼	—
dms., l.c.l., dlvd. zone 1	lb.	.29¾	.30¼
tanks, dlvd. zone 1	lb.	.27¼	—

Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.

Hydrobromic acid, medicinal, 48%, cbys., frt. equald	lb.	.48	.56
Hydrochloric acid, anhyd. (see Hydrogen chloride).			
Hydrochloric acid, 18°, cboys., c.l., works 100 lbs		2.50	—
cbys., t.c.l., dlvd. Metropolitan area 100 lbs		2.90	3.05
tanks, works, frt. equald	ton.	28.00	—
20°, cbys., c.l., works 100 lbs		2.75	—
cbys., t.c.l., dlvd. Metropolitan area 100 lbs.		3.15	—
tanks, works, frt. equald	ton.	30.00	—
Hydrochloric acid, 22°, cbys., c.l., works 100 lbs		3.25	—
cbys., t.c.l., dlvd. Metropolitan area 100 lbs		3.65	—
tanks, works, frt. equald	ton.	35.00	—
Hydrochloric acid CP, USP, consumers, cbys., extra, c.l., works	lb.	.15¾	—
cbys., t.c.l., same basis	lb.	.17¼	.17¾
Hydrochloric acid, 5-pint bots., extra cs., c.l., same basis.	lb.	.20¼	—
Hydrocortisone acetate, bulk, bots., kilo lots or more	gram.	1.05	1.90
Hydrocortisone alcohol, bulk, bots., kilo lots or more	gram.	1.10	1.90
Hydrocyanic acid, dilute, NF, 2%, 5-pt. bots., f.o.b. works	pt.	.70	—
Hydrofluoric acid, anhyd. (see Hydrogen fluoride).			

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n-BUTYL 40% HCHO
n-PROPYL 40% HCHO

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Hydrofluoric acid, aqueous, 70%, 55-gal or 30-gal dms., c.l., t.t., dlvd 100 lbs. 19.25 - —
55-gal dms., l.c.l., t.t., dlvd 100 lbs 20.75 - —
30-gal dms., c.l., t.t., dlvd 100 lbs. 21.00 - —
20-gal dms. l.c.l., t.t., dlvd 100 lbs. 22.50 - —
tanks, works frt equald 100 lbs 13.40 —

Delivered prices apply to all states east of Arizona California Colorado Idaho, Montana, Nevada, New Mexico Oregon, Washington and Wyoming In those states add $2.70 per cwt. for drum delivery

Hydrofluosilicic acid dms., works, 30% basis lb. .06 - —
Hydrofuramide dms., fib. ctns., works lb 30 - .40
50-lb cyls., l.c.l., works lb .55 - .60
Hydrogen chloride anhyd., 50-lb. cyls. l.c.l., works lb .45 - —
Hydrogen cyanide liq., 98% tanks, works lb .14 - —
Hydrogen fluoride anhyd., cyls., dlvd E lb 30½ - .32½
cyls. dlvd W lb .39 - —
tanks works lb .18 - —
Hydrogen peroxide 35% dms., c.l., dlvd lb 202 - —
dms., l.c.l., dlvd. lb. 211 - —
tanks dlvd lb .1800- —
Hydroquinone, photo grade, dms., 50-lbs., f.o.b works lb 1.10 - —
Tech. dms. c.l., dlvd. lb .82½- —
dms. l.c.l. dlvd lb. .84½- —

Hydroquinone monomethyl ether, dms., t.l. dlvd lb 2.59 - —
dms., l.t.l., dlvd. lb 2.61 - —
Hydroxyacetic acid, tech., 70% dms. Philadelphia and Chicago lb .11 - —
tanks Belle W Va lb .073 - —
Hydroxycitronellol, cns lb 4.85 - 5.75
Hydroxyethyl cellulose, add grades, fib dms., 20,000-lb. lots or more, f.o.b shipping point lb. .84 - —
fib dms., 2,000 to 19,999-lb lots, same basis lb. .89 - —
fib dms., 100 to 1,999-lb lots, same basis lb. .93 - —
fib dms., smaller lots, same basis lb 1.03 - —
Hyoscine salts (see Scopolamine).
Hyoscyamine hydrobromide, bots. oz. 7.75 - 8.50
Hyoscyamine sulfate, bots oz. 7.75 - 8.50
Hypophosphorous acid, purit., 50%, 10-cbys. f.o.b works lb 1.95 - —
NF 50%, 10-cbys., same basis lb. 1.35 - —

I

Ichthammol, NF, dms. lb. .75 - 1.05
Indigo (see Dyes, coaltar, 1171 indigo, syn.).
Indole, CP bots. lb. 13.75 -15.00
Inositol, 50-100 lb. dms., 1,000 lbs. or more, dlvd. lb. 4.50 - —
Inositol, 50-lb. lbs., less than 1,000 lb., dlvd lb 4.75 - —
10 lb cns., 10-50 lbs. dlvd lb 5.00 - —
5 lb bots., dlvd. lb 5.25 - —
Insect flowers (see Pyrethrum).
Iodine, crude, kgs. lb. .95 - 1.10
Resub., USP dms. f.o.b works lb 2.00 2.02
Iodochlorohydroquinolin, USP, dms. lb 3.60 - —
Iodoform, NF dms. 300-lbs. f.o.b. works lb 4.90 - —
dms., 100-lbs., same basis lb 5.05 - —
a-Ionone, cns. lb 4.60 5.75
b-Ionone, cns lb 4.15 6.15
Ipecac root, whole bgs. lb 8.00 8.50
Powd., bbls, bxs. lb 9.50 10.00
Irish moss, bleached, prime, bls. lb. .25 - .27
Iron blue, alkali-resisting, bbls., c.l., dlvd E lb. .57 - —
bbls. l.c.l. ton lots same basis lb. .58 - —
bbls., smaller lots, same basis lb. .59 - —
Dom., reg. bbls., c.l. dlvd E lb. .52 - —
Iron blue, alkali-resisting dom., reg., bbls. l.c.l., ton lots, same basis lb. .53 - —
bbls. l.c.l. smaller lots, same basis lb .54 - —
Imp., British, reg., bbls. c.l. dlvd. E lb. .48 - —
bbls., l.c.l., ton lots, same basis lb .49 - —
bbls., l.c.l., smaller lots, same basis lb. .50 - —
Iron blue dlvd. prices 1c higher for Pacific Coast states Wash., Ore., Cal., N M., Ariz., Mont., Wyo. Utah. Col and Nev.
Iron compounds (see Ferric or Ferrous).
Iron oxide, black, pure, bgs., c.l., works lb. .14¾- —
bgs., l.c.l., works lb. .15 - —
Iron oxide, brown, pure, bgs., c.l., works lb. .14¼ - —
bgs., l.c.l., works lb. .14½ - —
Iron oxide, metallic, brown, bgs., works lb. .05½ - —
Iron oxide, Persian Gulf, red., bgs., c.l., works lb. .08¾- —
Iron oxide, red, dom., pure, bgs., Bethlehem, E. St. Louis, New York City lb. .14¼- —
Iron oxide, red, nat., 75-85% ferric oxide, bgs., c.l., works lb. .06¼ - —
bgs., l.c.l., works lb. .06½- —
Iron oxide, Spanish red, bbls., c.l., ex dock lb. .05¾ Nom.
bbls., l.c.l. ex dock lb. .06 Nom.
bbls., l.c.l., ex whse, New York. lb. .06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb. .06¾- .07
Peruvian type, bgs., l.c.l lb .023 .024
Iron oxide, yellow pure, light lemon shade bgs. c.l. works lb .12¼ - —
other shades, same basis. lb. .12 - .12½
Isoamyl alcohol, dms., c.l., works, frt. alld E lb. .27½- —
dms., l.c.l., same basis lb .29 - —
tanks, same basis lb. .25 - —
Isoborneol cns lb 1.44 1.80
Isobornyl acetate cns. lb .46 .56
Isobornyl formate, dms. lb 1.20 —
Isobornyl proprionate, dms. lb 1.25 1.35
Isobutyl acetate, perfume grade, cns lb. .35 - —
Isobutyl acetate, solvent grade, dms., c.l., dlvd E of Rockies lb. .15¼ - —
dms., l.c.l., same basis lb. .16¾ - —
tanks same basis lb. .12¾- —
Isobutyl alcohol dms., c.l., dlvd lb. .15½ - —
dms., l.c.l., dlvd. lb. .17 - —
tanks, dlvd lb. .13 - —
Isobutylene, 99% tanks, works gal. .38 - —
Isobutyl isobutyrate, dms., f.o.b. works lb 75 - —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½ - —
dms., l.c.l., dlvd. lb. .28½ - —
Tech., dms., c.l., dlvd. lb. .22 - —
dms., l.c.l., dlvd. lb. .23 - —
tanks, dlvd lb. .19½ - —
Isobutyric acid, dms. c.l., t.l., dlvd. lb. .35 - —
dms., l.c.l., t.t.l., same basis lb. .36½- —
t.c. t.t., same basis lb .33 - —
Isobutyronitrile, dms., c.l., dlvd. lb. .47½- —
dms., l.c.l., dlvd lb. .48½- —
tanks, dlvd. lb. .45 - —
Isoeugenol cns. lb 3.40 4.25
Isoniazid, powd., bulk, kilo or more kilo. 18.00 - —
Isonicotinic acid, 100-lb fib. dms., works lb 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd. E. lb. .23½- —
dms., l.c.l., dlvd. E. lb. .25 - —
tanks, dlvd E lb. .21 - —
Isopentane, com'l. grade, tanks, f.o.b Tex refy gal. .16½- —
Isophorone, dms., c.l., works lb. .24½- —
dms., l.c.l., works lb. .25¼- —
tanks, works lb. .22½- —
Isophthalic acid, dms., c.l., works, frt equald lb. .18 - —
dms. l.c.l., same basis lb. .19 - —
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate, dms., c.l., dlvd. lb. .14 - —
dms., l.c.l., same basis lb. .15½- —
tanks, same basis lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .58 - —
dms., l.c.l., dlvd gal. .68 - —
tanks, dlvd gal. .42 - —
Isopropyl alcohol refd., 95%, c.l., dms., dlvd gal. .60 - —
dms., l.c.l., dlvd. gal. .70 - —
tanks, dlvd gal. .44 - —
anhyd. c.l., dlvd. gal. .62 - —
dms., l.c.l., dlvd. gal. .72 - —
tanks, dlvd gal. .46 - —
Isopropyl benzene (see Cumene).
Isopropyl ether dms., c.l., dlvd lb. .09½- —
dms., l.c.l., dlvd lb. .11 - —
tanks, dlvd lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) tech., dms., c.l. t.l., works lb. 1.00 - —
dms., l.c.l., works lb. 1.05 - 1.25
tanks, works lb. .99 - —
Isopropylamine (see Mono, Di, or Tri-)
Isopropyl-N-phenyl carbamate, 450-lb fib dms., c.l., t.l., works lb. .75 - —
450-lb fib dms., l.c.l., works lb. .80 - .90
Isoquinoline, dms., works lb. .65 1.25
Itaconic acid, refd., bgs. c.l., f.o.b. works lb. .49½- —
bgs., l.c.l., same basis lb. .50½- —
Tech., bgs., c.l., same basis lb. .34½- —
bgs., l.c.l., same basis lb. .35½- —

J

J acid, paste, bbls., works, 100% basis lb 2.70 - —
Powd., bbls., same basis lb. 2.75 - —
Jalap root, NF bls. lb. .60 - —
NF, powd., bbls., bxs. lb 70 - .75
Japan wax, cs. lb. .29 - .31
Juniper berries, bgs. lb 16 - .17
Juniper berry oil, NF, bots. lb 2.90 - 3.75
Twice rectified, bots. lb 3.25 - —
Juniper tar oil, NF, dms. lb. .42 - .60
Juniper wood oil, tech., cns. lb. .38 .55

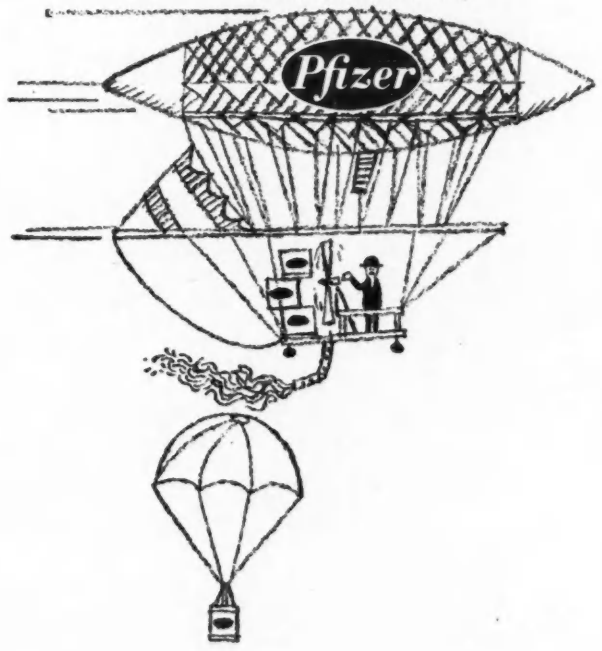
K

Kaolin (see also Clay, China).
Kaolin, NF, powd., fib. dms. lb. .10 - .12
NF, colloidal, 50-lb bgs. lb. .15½- .17½
Karaya gum, No. 1, NF, powd., bls lb. .48 - .50
No. 2, powd., bbls. lb. .43 - .45
No. 3, powd., bbls. lb. .37 - .40
Koch acid, bbls., frt. alld., 100% basis lb. 1.00 - —
Kola nuts, bgs. lb. .13 - .15

L

L acid, bbls., works lb. 1.25 - —
Lacquer diluent, petroleum, 140°F. 200°F. b.r., tankcars, New Jersey and New York gal. .20 - —
Group 3 gal. .15125- —
Houston, Texas gal. .16 - —
Lacquer diluent, petroleum, 200°F-240°F b.r., tankcars, New Jersey or New York gal. .20 - —
Group 3 gal. .14125- —
Houston, Texas gal. .16 - —
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald lb. .1985- —
bbls., dms., 20 or more, frt. equald lb. .2035- —
bbls., dms., 5 to 19, frt. equald. lb. .2085- —
bbls., dms., 1 to 4, frt equald. lb. .2135- —
Lactic acid, edible, 80%, bbls., c.l., dms., frt. equald lb. .3335- —
bbls., dms., 20 or more, frt. equald. lb. .3385- —

Science for the world's well-being



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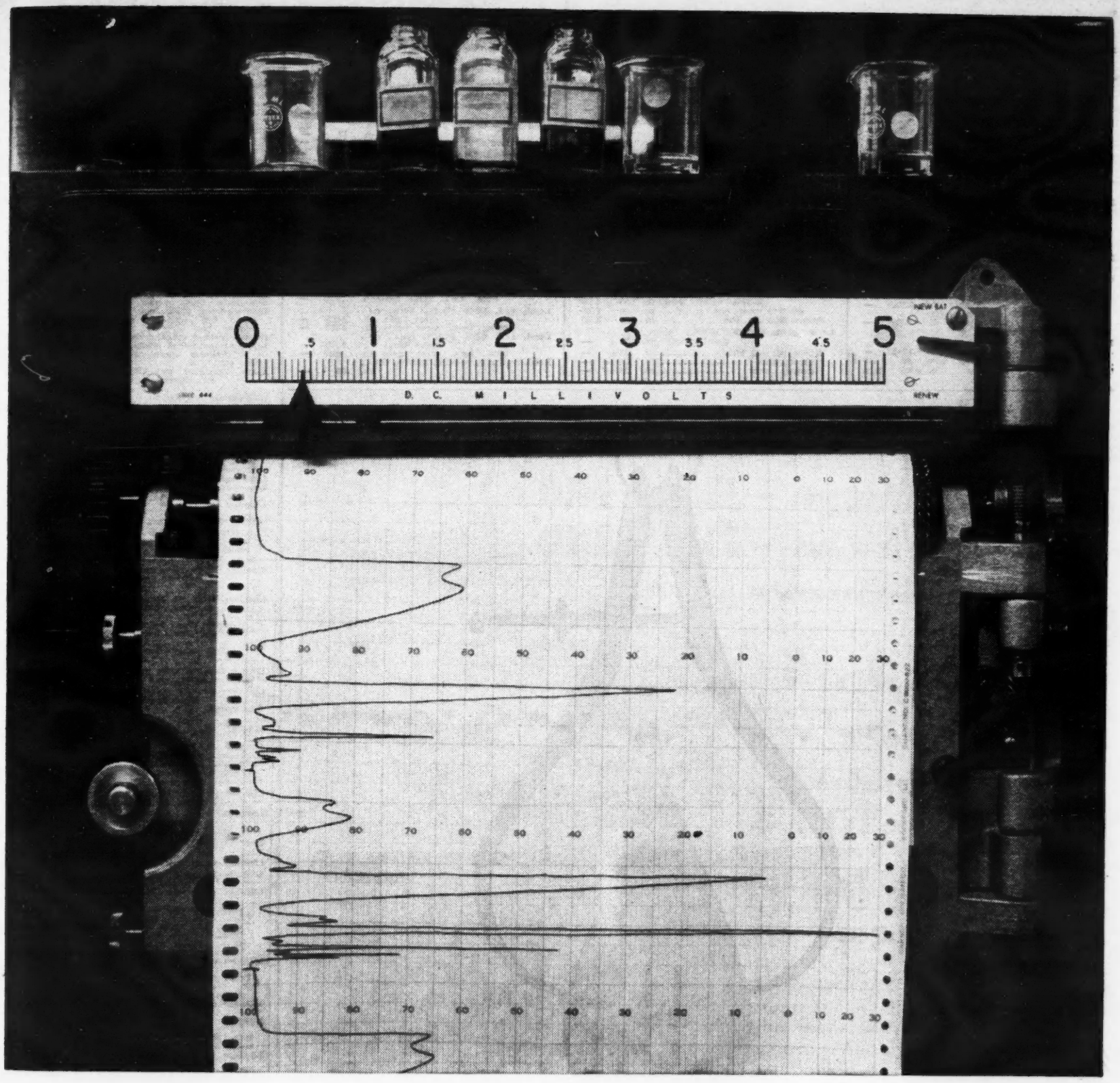

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Lactic acid edible, 80% bbls., dms., 5 to 19, frt. equald ..lb. .3435- —
bbls. dms., 1 to 4, frt equald. lb. .3485- —
Plastic grade, 50%, c.l., bbls., works lb .2740- —
bbls., 20 or more, works lb .2790- —
bbls. 5 to 19 works ..... lb .2840- —
bbls., 1 to 4, works ..... lb .2890- —
80% bbls., c.l., works .... lb .4625- —
bbls. 5 to 19, works ..... lb .4725- —
bbls. 1 to 4, works ..... lb .4775- —
Tech., 44%, bbls., c.l., works. 100 lbs.12.45 - —
bbls., l.c.l., works .... 100 lbs.12.85 - —
USP, 85% cbys. ..... lb. .85 - —
Lactose, crystalline, edible, bgs., 23,000-lb lots, frt equald lb. .14 - —
bgs., 6,000 lb lots, frt equald lb. .14½- —
bgs., 2,000-lb lots frt equald lb .14¾- —
bgs., 200-lb lots, frt equald lb .15¼- —
Edible lactose in fib dms., ½c higher.
Lactose, ferment. grade bgs., c.l., works lb .08½- —
Lactose, USP, reg., fib dms., 30,000-lb lots, frt equald lb. .21½- —
fib dms., 2,000-lb lots, frt. equald lb. .22¼- —
200-1,880-lb lots, frt. equald lb .22¾- —
USP lactose in bags ½c to 1c lower.
Lactose, USP spray dried, bgs., t.l., frt. equald lb. .18½- —
bgs., t.l.l. frt equald lb .19 .19¾
Lady's slipper root, bls lb 3.00 3.50

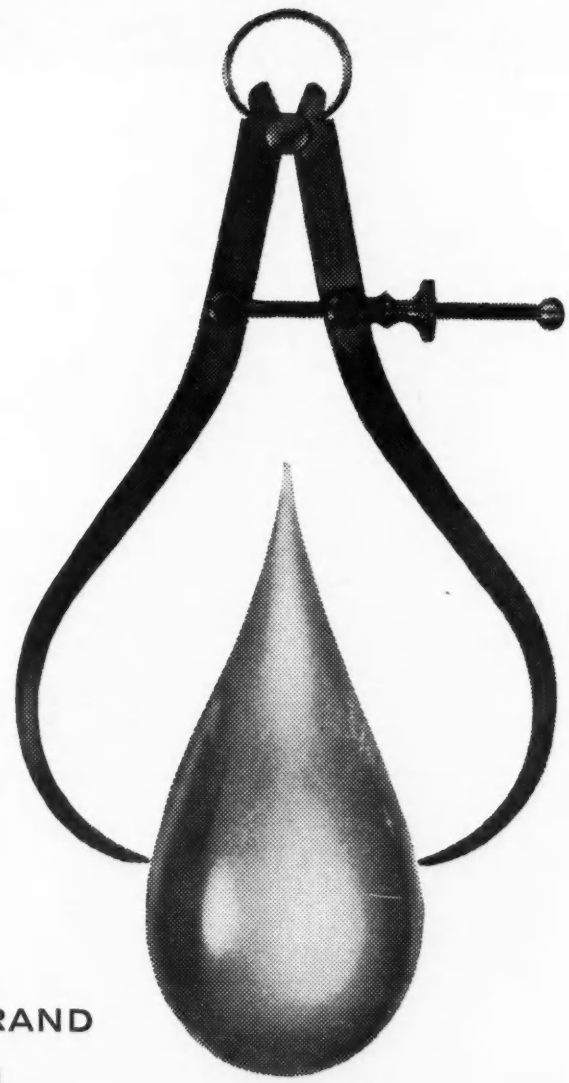
Lamp black, bgs., c.l., works....lb. .16 - .45
Lanolin, USP, anhyd., 400-lb. dms., works lb. .24 - .26
USP, anhyd., cosmetic, 400-lb. dms., works..lb. .26 - .30
USP, hydrous, 400-lb dms., works. lb. .29 - —
Lard, cash, dms., Chicago.....lb. .0940- —
Lard oil (see Grease oil).
Larkspur seed bgs. .....lb. .55 - —
Laurel leaf oil, dms. cns.....lb 9.75 -12.50
Laurent's acid, bbls .....lb. .70 - —
Lauric acid, pure, dms.....lb. .33¾- .36¼
tanks .....lb. .31¼- —
Lauryl alcohol, bots .....lb 2.00 2.50
n-Lauryl methacrylate, dms., c.l., t.l., works lb. .65½- —
dms., t.t.l., works ..... lb. .66 - —
Lavandin oil, 22-24%, dms. ... lb. 1.10 - 1.50
Abrial, dms ..... lb. 1.00 - 1.50
Lavender flowers, medium, bls lb. .55 - .60
Ord., bls. ..... lb. .20 - .25
Select., bls. ..... lb. .90 - 1.00
Lavender flower oil, USP, French, 35-37% ester, cns lb. 1.85 - 4.00
40-42% ester, cns. ..... lb. 5.00 - 7.75
Spike, Spanish, cns. ..... lb. 2.20 - 3.00
Lead acetate, NF, cryst., gran., powd., bbls lb. .34½- —
White, cryst., bbls. .....lb. .25½- —
gran., bbls. .....lb. .26½- —
powd., bbls. .....lb. .26½- —

Lead arsenate, acid powder, dealers, 3-50-lb. bgs. or any quantity, frt. alld on $150 or more lb. .30½- —
1-lb bgs., same basis lb. .47 - —
Lead, blue, basic sulfate, bbls., c.l., shipt point, frt. alld lb. .17 - —
bbls., l.c.l., same basis ..... lb. .18 - —
Lead carbonate (see Lead, white, basic carbonate).
Lead chloride, dms. ..... lb. .52 - —
Lead iodide, NF, V jars ..... lb 3.82 - —
Lead linoleate, fused, 26.5% Pb, dms. lb. .38 - —
Lead metal prime, pigs, New York. lb. .12 - —
St. Louis ..... lb. .1180- —
Lead monosilicate, bgs., c.l., works, frt equald lb. .1385- —
bgs., t.c.l., same basis ..... lb. .1485- —
Lead naphthenate, liq., 16% Pb., dms., dlvd lb. .19½- —
24% Pb., dms., dlvd ..... lb. .24¼- —
Solid, 37% Pb., dms. dlvd .. lb .31¾- —
Lead nitrate, bbls ..... lb .24¼- .26¾
Lead orthosilicate gel., 50-60% PbO, dms., works lb. .29¾- .34¼
Lead peroxide, tech powd., bbls lb. .45 - .50
Lead phthalate dibasic, dms, works. lb. .41 - —
Lead, red, 95% Pb_3O_4, or less, bbls., c.l., works, frt. equald. lb. .1475- —
bbls., t.c.l., same basis.lb. .1575- —
Lead, red, 97% Pb_3O_4, bbls., c.l., same basis..lb. .1495- —
bbls., t.c.l., same basis lb. .1595- —
Lead, red, 98% Pb_3O_4, bbls., c.l., same basis..lb. .1510- —
bbls., t.c.l., same basis lb. .1610- —
Lead, resinate, precip., 23%Pb, dms., lb. .49 - —

Lead salicylate, normal dms., works lb. .46 - —
Lead silicate (see Lead white basic silicate).
Lead silicochromate, bgs., c.l., f.o.b. mfrs. point, frt. alld lb. .20 - —
bgs., t.c.l., same basis.....lb. .21 - —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate liq., 16% Pb, dms lb. .17¼- —
24% Pb, dms.....lb. .21¼- —
Solid, 30% Pb, dms.....lb. .26¾- —
Lead, white, basic carbonate, bgs., c.l., shipt pt., frt. alld lb. .18 - —
bgs., t.c.l., same basis ... lb. .19 - —
basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .16½- —
bgs. t.c.l., same basis ... lb. .17½- —
basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .17 - —
bgs. t.c.l. same basis lb. .18 - —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works. lb. .14 - .15
non-ret. dms., t.c.l., same basis lb. .15 - .16
Lecithin, edible, tech., unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret. dms., t.c.l., same basis lb. .14 - .15
Lemon bioflavonoid complex, 100-lb. package, works lb. 6.45 —
Lemon oil, USP, Calif., cns., dms lb 1.25 1.50
Messina cns ..... lb 3.25 4.00
Lemongrass oil, cns., dms.....lb. 2.10 - —
di Leucine dms., works ..... lb. 12.25 -15.00
Licorice root, gran., bls. ..... lb .13 —
Powd. bls. ..... lb .15 .16
Whole, bls. ..... lb .09 .10
Lignaloe wood oil, Mexican, cns lb 2.75 3.50
Lignosulfonate (see under Ammonium or Sodium lignin sulfonate)
Lilac oil ..... lb. 1,500.00
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs., works, E ton. 14.25 - —
Chemical, hydrated, bgs., c.l., same basis ton. 17.25 - —
spray, bgs., c.l., same basis ton. 18.25 - —
For New York delivery, add $6.29 freight charge
Lime oil, dist., Mexican, cns....lb. 5.50 - —
West Indian, cns .....lb. 5.50 - —
Expressed, West Indian, cns ..lb. 7.75 8.75
Lime salts (see Calcium).
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool, ex bois de rose oil, dms. lb 2.45 4.25
Syn., 98-100% dms., works .. lb 2.40 2.75
Linalyl acetate ex bois de rose, 90-92%, dms lb. 2.65 4.50
96-98% dms lb 3.25 - —
Syn., 98-100%, dms., works .. lb. 2.75 - —
Lindane, 25% formulation, to distributors, dms, frt. alld. lb. 1.35 - 1.50
Lindane, tech., to formulators, 250-lb dms., 5,000 lbs., dlvd. lb. 2.13 - —
100-lb dms., 5,000-lbs., dlvd.lb. 2.15 - —
250-lb. dms., less than 5,000-lbs., dlvd lb. 2.18 - —
100-lb dms., less than 5,000-lbs., dlvd lb. 2.20 - —
Linden flowers, with leaves bls lb. .35 - .40
Without leaves bls. lb. .42 .45
Linseed meal, expeller, 32% bulk Minneapolis, mills .ton. 56.50 - —
Extracted, 34% bulk, same basis ton. 50.00 - —
Linseed oil, raw, dms., c.l., New York..lb. .1610- —
dms., t.c.l., New York ... lb. .1700- .1750
tanks, f.o.b. Minneapolis ...lb. .1250- —
tanks, New York .....lb. .13b1- —
tankwagon, New York .... lb. .1421- —
Boiled linseed oil, .006c. per lb. higher.
Linseed oil, acid, dist., dms ... lb. .1980- —
Water-white, dms. .....lb. .2280- —
Litharge, comi., powd. bbls., c.l., works, frt equald lb. .1425- —
bbls., t.c.l., same basis .. lb. .1525- —
Lithium aluminum hydride, lump, dms., works lb. 33.00 -39.00
Lithium benzoate, dms. lb. 1.65 - 1.67
Lithium bromide, NF, gran., bgs., works, frt. equald lb. 2.60 —
Lithium carbonate, NF, dms., c.l., t.l., dlvd lb. 1.29½- —
dms., ton lots to t.l., dlvd lb. 1.30 - 1.30½
Tech., dms., c.l., frt. alld .... lb. .67 - —
dms., t.l., same basis ..... lb. .73 - —
dms., ton lots, same basis .. lb. .76 - —
dms., smaller lots, f.o.b., plant. lb. .81 - —
Lithium chloride, CP, anhyd., dms., ton lots lb. 1.23½- —
Tech., anhyd., dms., c.l., t.l., dlvd. or works, frt. alld lb. .87 - —
dms. t.c.l. same basis lb. .88 - .92
Lithium citrate, NF, dms. ton lots. lb. 1.50 - —
Lithium fluoride, dms., 20,000-lb. lots, dlvd lb. 2.15 - —
bbls., ton lots and more, dlvd lb. 2.18½- —
bbls., less ton lots, dlvd. lb. 2.23½- —
Lithium hydride, powd., dms., 500-lbs. lots or more, works, lb. 9.50 - —
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld lb. .72 - —
dms., t.c.l., frt. alld. lb. .73 - —
Lithium manganite, dms., works lb. .95 - 1.05
Lithium nitrate, tech., dms., 100-lb lots lb. 1.15 - 1.25
Lithium salicylate, dms. ... lb. 1.60 - 1.70
Lithium silicate, dms., works .. lb. 1.10 - 1.20
Lithium stearate, dms., c.l., works, lb. .47½- —
dms. ton lots, works ..... lb. .48½- —
dms., less-ton lots, works .... lb. .53½- —
Lithium sulfate, dms., 100-lb. lots, lb. 1.15 - 1.25
Lithium titanate, dms., works lb. 1.15 - 1.25
Lithol red toner, barium, bbls., works lb. .98 - —
Lithol-rubine red toner, pure, bbls., works lb. 1.50 - —
Resinated, bbls., works ... lb. 1.47 - —
Lithopone, ord., bgs., c.l., dlvd. E. lb. .08¾- —
bgs., t.c.l., dlvd. E ..... lb. .09⅛- —
Titanated (high-strength), bgs., c.l., dlvd lb. .11 - —
bgs., t.c.l., dlvd. ..... lb. .12 - —
Lobelia herb, bls .....lb. .75 - .80
Lobeline sulfate, bots., 50-oz. lots, works oz. 30.00 - —
Locust bean gum, powd., bgs. ....lb. .35 - .40
Lycopodium, cs. ..... lb. 3.25 - 3.50
l-Lysine monohydrochloride, 25-lb. dms ..lb. 4.95 - —

M

Mace, Siauw, No. 1, bls. .....lb. 1.70 - —
No. 2, whole, bls. .....lb. 1.40 - —
siftings, bls. .....lb. 1.35 - —
Mace oil, dist., cns., dms .....lb. 9.00 -11.00
Magnesia, calcined, tech., bgs., ctns., frt. equald lb. .25¾- .26⅛
Tech., syn., rubber grade, light, bgs., c.l., frt. equald lb .28¾- .30
rubber grade, extra light, bgs., c.l., frt. equald lb. .28 - —
bgs., t.c.l., frt. equald lb. .28¾- —
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points



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Fritzsche Brothers, Inc., 76 Ninth Ave., New York 11, N.Y.
Ungerer & Co., 161 Avenue of the Americas, New York 13, N.Y.

Magnesia, calcined, tech., heavy, 85%, bgs., c.l., f.o.b. Lunning, Nev ton 39.50 • —
81%, bgs., c.l., same basis, ton 49.50 • —
95%, bgs., c.l. same basis, ton 59.00 • —
USP, light, bgs. lb. .36½- .37½
USP, heavy, bgs. lb. .36½- .37½
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald ton 86.25 • —
Chemical grade, deadburnt, standard grain, bulk, c.l., Chewelah, Wash. ton 46.00 • —
Magnesium bromide, 80-lb. dm., f.o.b. works lb. 1.15 • —
Magnesium carbonate, tech., bgs., c.l., frt. equald lb. .11 - —
bgs., t.l., frt. equald lb. .11½- —
bgs., l.c.l., frt. equald lb. .13½- .14
Magnesium carbonate, USP, bgs., c.l., frt. equald lb. .13½- —
bgs., t.l., frt. equald lb. .14 - —
bgs., l.c.l., frt. equald lb. .15 16
• Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92%, flake or pebble, drums, c.l. works lb. .12¾- —
dms. l.c.l., works lb 14 .15
Magnesium chloride, hydrous, 99%, flake, bgs., c.l., works ton 60.00 —
bgs., l.c.l., works ton 75.00 -100.00
Magnesium gluconate 100-lb dm., f.o.b works E lb. 1.42 —
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b. works lb. .24½- .25½
Magnesium tauryl sulfate, dms., c.l., frt. alld lb. .22½- —
dms., t.l.l., frt alld. lb. .23½- —
tanks, frt alld. lb. .21½- —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works lb .36 - —
pigs, 10,000-lb. lots or more, works lb. .35¼- —
sticks, cs., works, frt alld on carlots lb. .59 - —
Magnesium nitrate, cryst., dms., works lb. 29 • —
Magnesium oxide (see Magnesia calcined).
Magnesium phosphate tribasic, NF, bbls lb. 75 • —
Magnesium silicate (see Talc)
Magnesium silicofluoride, dms., works lb .10½- .12
Magnesium sulfate, tech., bgs., c.l., works 100 lbs. 2.15 —
bgs. l.c.l., works 100 lbs 2.90 3.15
USP, cryst., bgs. c.l., works, 100 lbs. 2.35 - —
bgs. l.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 • —
bgs., smaller lots 100 lbs. 3.35 • —
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots lb. .38 • —
fib dms., 1,000-lb. lots lb. .40 • —
fib. dms., 100-lb. lots lb. .45 • —
Bulky and super grades of magnesium trisicilate 7c. per lb. higher.
Malachite green, straight, PTA, bbls., works lb. 5.30 • —
Malathion, dms., c.l., works lb. .89 - —
dms., l.c.l., works lb. .92 1.01
Maleic acid, cryst., powd., dms lb. .37¼- —
Maleic anhydride, dms., c.l., frt equald lb. .24 - —
dms., l.c.l., frt. equald lb. .25½- —
tanks, frt equald lb .22½ - —
Maleic anhydride in bags ½c. per lb. less.
Malic acid, tech., dms lb. .50 —
Mandelic acid, NF, dms., 1,000-lb. lots lb. 2.35 - —
dms. smaller lots lb 2 40 2.50
Mandrake root, bls. lb. .45 • —
Manganese acetate, dms., dlvd lb. .35 - —
Manganese borate, tech., fib. dms. lb. .23½- —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb. lots and more, works lb. .11 - .16
Manganese chloride, CP, anhyd., dms., 20,000-lb. lots, works lb. .21¾- —
smaller lots, works lb. .23½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works ton 148.00 - —
40,000 to 99,999-lb. lots, paper bgs., same basis ton 144.50 - —
40,000 to 99,999-lb. lots, dms. same basis ton 152.50 • —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $3 per ton higher.
Manganese gluconate, dms lb. 1.84 • —
Manganese hydrate, dms., dlvd lb. .35 • —
Manganese hypophosphite, NF, dms. lb. 3.52 - —
Manganese linoleate, liq., 4.35% Mn, dms lb. .35¾- —
Solid, precip., 8.2% Mn. bbls lb. .41¼ —
Manganese metal, electrolytic, dms., c.l., dlvd. E. lb. .34 - —
dms., ton lots, dlvd. E. lb. .36 - —
dms., smaller lots, dlvd. E. lb. .38 - —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld lb. .29¾- —
Manganese resinate, fused, 3½% Mn, dms lb. .29¼- —
Precip., 6½-7% Mn, dms lb. .37 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd., S. E ton 86.50 - —
bgs., l.c.l., dlvd. S. E ton 93.50 - —
Manganese tallate, 6% dms lb. .26½- —
Manila copal gum, C, bgs. lb. .35 - .39
DBB, bgs. lb. .25 - .28
DK, bgs. lb. No stocks.
DK, dust, bgs. lb. .14 Nom.
MA, soft, bgs. lb. .20 .24
WS, bgs. lb. No stocks.
Mannitol, com'l. fib. dms., ton lots, works lb. .60 - —
fib. dms., to ton lots, works lb. .62 - —
fib. dms., single dm., works lb. .65 - —
Marine pitch, dms. lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide)
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .26½- —
bgs., l.c.l., works lb. .28 - —
Menadione, USP, bots. gram. .044 - .05
Menhaden oil, crude, tanks, works, Atl. & Gulf lb. .06 - —
Menthol, nat., USP, Brazilian, large crystals, cs lb. 9.00 - 9.50
Nat., USP, Brazilian, regular crystals, cs. lb. 8.75 • —
Japanese, cs. lb. 12.00 • —
Syn., USP, racemic, 25-lb. lots lb. 4.25 • —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld lb. .44 • —
bgs., fib. dms. less ton lots, same basis lb. .46 • —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton lots, works, frt. alld lb. .54 • —
bgs., fib. dms., less ton lots, same basis lb. .56 • —

Mercuric chloride, NF, cryst., dms., 100 lbs., f.o.b works lb 4.03 • —
USP, gran. or powd., 50-lb. dm., 100 lbs., f.o.b. works lb. 3.78 • —
Mercuric cyanide, NF VIII, powd., fib. dms lb 5.94 • —
Mercuric iodide, red, NF, 100-lb. dm., f.o.b. works lb 6.97 • —
Mercuric oxide, red, NF IX 50-lb. dm., 100 lbs. f.o.b works. lb. 4.72 • —
tech., 50-lb dm. 100 lbs., same basis lb 4.52 • —
Mercuric oxide, yellow, NF, 50-lb. dm., 100 lbs., same basis. lb 4.89 • —
tech., dms. 100 lbs lb 4.35 • —
25-lb. fib dm lb. 4.38 • —
Mercurous chloride (see Calomel).
Mercurous iodide yellow, NF, 100-lb. dm f.o.b works lb 8.22 • —
Mercury, ammoniated (see White precipitate USP XV).
Mercury metal 76 lbs. per flask, net-flask 209.00 -212.00
Mesityl oxide dms. c.l., dlvd lb .15 —
dms. l.c.l., dlvd. lb. .16½- —
tanks, dlvd lb .12½- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid dms. works lb .57 - .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine)
Metatolylenediamine (see 2,4-Tolylenediamine).
Methacrylic acid glacial 98%, dms., truckloads frt equald lb. .42½- —
dms. smaller lots, frt equald. lb. .43 - .75
tanks, works, frt. equald lb. .40 • —

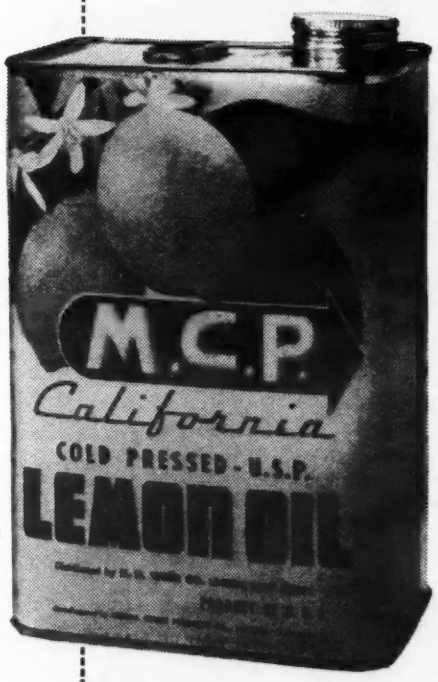
Methanol, nat, denaturing grade, tanks, frt alld gal. .35 • —
Syn., zone 1, dms., c.l., or t.l. min., dlvd gal. .51½- —
dms., t.c.l., dlvd. gal. .61½- —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35 • —
tankwagon, 4,000 gal. min., dlvd gal. .30 • —
tankwagon, 4,000 gal. min., f.o.b. terminal gal. .29 • —
Methanol, syn., zone 2, dms., c.l., or t.l., min frt. alld. or dlvd. gal. .55½- —
dms., t.c.l., works gal. .65½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd., Metropolitan area gal. .39 • —
tanks, 4,000 gal. min., dlvd. gal. .34 • —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methapyrilene fumarate, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 21.75 • —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt equald lb. 27.25 • —
Methenamine (see Hexamethylene-tetramine).

Methionine hydroxyanalogue (calcium salt) 90% min., dms., t.l., frt alld lb 1.10 • —
dms., t.t.l., same basis lb 1.16 —
dl-Methionine, fib dms., frt. alld., 50-lb or more lb 3.50 —
Feed grade, 98% fib dms same basis lb. 1.43 • —
Methoxychlor 50% wettable powder dealers, dms., cs lb .66 —
Methyl abietate, non-ref dms., c.l., dlvd zone 1 lb .21½- —
non-ref. dms., t.c.l., same basis lb. .22 .22½
Methyl abietate, hydrogenated, non-ref. dms., c.l., dlvd zone 1 lb. .23½- —
non-ref. dms., t.c.l., same basis, lb 24 24½
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Methyl acetone, nat. dms., t.c.l., E of Miss. frt alld gal. .62½- —
Methyl acetone, syn., dms., c.l., frt. alld E gal. .66 - —
dms., t.c.l., frt. alld. E. gal. 76 - —
tanks, frt alld. E. gal. .51 —
Synthetic methyl acetone E territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.

ONE LABEL — *First Grade Only*

ONE PRICE — *That Saves You Money*

. . . and Perfect Performance for *Every* Purpose!



M. C. P.

Pure
Unadulterated
California

LEMON OIL

U. S. P.

An *Exclusively First Grade Lemon Oil* . . . Cold Pressed in California . . . and *Packed by the Producer* to Assure Highest Quality

For nearly 30 years, Mutual Citrus Products Co. has been cold-pressing California lemon oil for distribution by others. Now, M.C.P. LEMON OIL is being *prepared and packed* under the M.C.P. label. There is only *one label* and *one* quality — *the highest* — for M.C.P. LEMON OIL. Yet, M.C.P. LEMON OIL costs you *less* . . . while providing a product that is unsurpassed for flavor, purity, and dependability . . . for *every* purpose.

Produced and Packed by

MUTUAL CITRUS PRODUCTS COMPANY

Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anaheim, Calif.

R. D. WEBB & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

Methyl acrylate, dms., c.l., t.l., dlvd. lb. .39 - —
dms., l.t.l., dlvd. lb. .40 - —
tanks, dlvd. lb. .37 - —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E. lb. .17 - —
dms., l.c.l., dlvd. E. lb. .18½- —
tanks, dlvd. E. lb. .14½- —
Methyl amyl alcohol, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Methyl amyl ketone, dms., works. lb. 1.05 - —
N-Methylaniline, tech., tanks, frt. alld. lb. .60 - —
Methylanthranilate, cns. lb. 2.25 - 2.45
Methyl benzoate, cns., dms. lb. .60 - .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld lb. .62 - .65
on 100 lbs lb. .79 - .82
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works lb. .82 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .89 - —
50-lb. bgs., smaller lots, frt. alld. on 100 lbs lb. 1.05 - —
Standard vis. (15,400 cps.) 50-lb. bgs., c.l., frt. alld. lb. .69 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .76 - —
50-lb. bgs., smaller lots, frt. alld.

Methyl chloride, indust., cyls., frt. equald. lb. .22¼- —
tanks, multi-unit, same basis. lb. .16¼- —
tanks, single unit, same basis. lb. .12¾- —
Refrigerator mfrs., cyls., dlvd lb. .48¾- —
Other consumers or service men, cyls., dlvd. lb. .67¾- —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns. lb. 1.55 - 1.80
Methyl ethyl ketone, dms., c.l., dlvd. lb. .13 - —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd. lb. .12½- —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 - —
dms., l.c.l., works lb. .45¾- —
tanks, works lb. .43 - —
Methyl formate, refd., dms. lb. .35 - .40
Tech., non-ret. dms., any quantity, works lb. .10 - —
tanks, works lb. .07 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .21 - —
100-lb. multiwall paper bgs., t.l., min. 23,000 lbs., works. lb. .21½ —
100-lb. multiwall paper bgs., l.t.l., works lb .23 —
Methyl heptin carbonate, bots. lb. 27.75 - 31.00
Methyl p-hydroxybenzoate, fib. dms. lb. 1.90 - 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 - 3.85

Methyl isoamyl ketone, dms., c.l., dlvd. lb. .20 - —
dms., l.c.l., dlvd. lb. .20½- —
tanks, dlvd. lb. .17½- —
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl Ketone, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt. equald, with Belle, W. Va. lb. .31 - —
dms., smaller lots, same basis lb. .31½- —
tanks, same basis lb. .29 - —
Methyl naphthyl ketone, cryst., cns. lb. 2.45 - 4.30
Methyl parahydroxybenzoate (see p-Hydroxybenzoate).
Methyl parathion, tech., 80%, dms., frt. alld. E. lb. .84 - —
Methyl parathion prices 2c. per lb. higher in West.
Methyl roseaniline chloride, NF., 5-lb. fib. dms. lb. 6.90 - —
Methyl salicylate, dms., t.l., frt. alld. lb. .60¼- —
dms., l.c.l., same basis lb. .62½- .67½
Methyl testosterone, USP, 100-gram. bots gram. No Prices.
2-Methyl-5-vinyl pyridine, 40-dm. lots or more, f.o.b. works lb. 1.30 - —
5-39 dm. lots, same basis lb. 1.35 - —
tanks, same basis lb. 1.25 - —
Methyl violet toner, molybdated, PMA, bbls., dlvd. E. of Rockies lb. 2.80 - —
Tungstated, PTMA, bbls., same basis lb. 4.35 - —
Methyl violet prices 1c. higher W. of Rockies.

Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb. 2.28 - —
Methylene chloride, tech., straight or assorted, dms., c.l., or t.l., dlvd. lb. .13½- —
dms., l.c.l., l.t.l., dlvd lb. .15¾- —
tanks, 4,000-gal. min., dlvd lb. .12¼- —
tanktrucks, 1,000-gal. min., dlvd. lb. .13¼- —
b-Methylnaphthalene, 32°C., m.p., dms., works lb .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methyl-pyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs., c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —
wet-grd., biotite, bgs., c.l., works, frt. alld.E lb. .06½- —
bgs., l.c.l., ex-whse. lb. .07¼- —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E. lb. .08¼- —
bgs., l.c.l., ex-whse or freight alld. E lb. .09 - —
Mica, wet-grd., rubber, bgs., c.l., works, frt. alld. E lb. .08 - —
bgs., l.c.l., ex-whse, or frt. alld. E lb. .08¾- —
wallpaper, bgs., c.l., works, frt. alld.E lb. .08¾- —
bgs., ex-whse. or frt. alld. E. lb. .09 - —
white, 5-10 microns, bgs., c.l., works, frt. alld. E. lb. .08¼- —
Mica, wet-grd. W. of Miss. ½c. higher; W. of Rockies 1c. higher.
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11
laminating grades, tankcars, works lb. .11 - .12
Mineral black, bgs., works lb. .0160- .0673
Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. refy gal. .65 - —
50-65 vis., non-ret. dms., l.c.l., basis gal. .70 - —
tankcars, refy. gal. .49 - —
Mineral oil, white, tech., 65-75 vis., non-ret. dms., c.l., same basis gal. .65 - —
non-ret. dms., l.c.l., same basis gal. .70 - —
tankcars, refy. gal. .49 - —
NF, 80-90% vis., non-ret. dms., c.l., same basis gal. .66 - —
non-ret. dms., l.c.l., same basis gal. .71 - —
tankcars, refy. gal. .50 - —
NF, 135-138 vis., non-ret. dms., c.l., same basis gal. .72 - —
Mineral oil, white, NF, 135-138 vis., non-ret. dms., l.c.l., same basis gal. .77 - —
tankcars, rfy. gal. .56 - —
NF, 145-155 vis., non-ret. dms., c.l., same basis gal. .78 - —
non-ret. dms., l.c.l., same basis gal. .83 - —
tankcars, refy. gal. .62 - —
Mineral oil, white, USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .80½- —
non-ret. dms., l.c.l., same basis gal. .85½- —
tankcars, refy. gal. .64½- —
USP, 200-210 vis., non-ret. dms., c.l., f.o.b. refy gal. .82½- —
non-ret. dms., l.c.l. gal. .87½- —
tankcars, refy gal. .66½- —
USP, 340-350 vis., non-ret. dms., c.l., f.o.b. refy gal. .87½- —
non-ret. dms., l.c.l. gal. .92½- —
tankcars, refy. gal. .71½- —
(For f.o.b N. Y. add 2c. for tankcars; 2c. for c.l., and 3c. for l.c.l. non-ret. dms.).
Mineral orange, American. bbls., c.l., works lb. .17 - —
bbls., c.l., same basis lb. .18 - —
Mineral spirits, petroleum, odorless, tankcars, New Jersey gal. .29 - —
New York gal. .305 - —
Houston, Texas gal. .25 - —
regular, tankcars, New Jersey and New York gal. .18 - —
Group 3 gal. .12875- —
Houston, Texas gal. .145 - —
140 F. flash, New York, New Jersey at terminal gal. .205 - —
Houston, Texas gal. .17 - —
Mink oil, dms. lb. 2.75 - —
Mirbane oil (see Nitrobenzene).
MNPT maroon toner, kgs., c.l., works lb. 6.30 - —
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .11¼- .12
tanks, New York gal. .13½- —
Molybdated orange, bbls. lb. .49 —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo. 7.84 - —
325 mesh, ctns., works kilo. 9.13 - —
Molybdenum trioxide, purif., dms., works lb. 1.15 - —
Tech., chemical, dms., works, basis Mo content lb. 1.48 - —
Tech., metallurgical, dms., works, basis Mo. content lb. 1.47 - —
Molybdic acid, 85%, dms., works. lb. 1.05 - 1.15
Monoallylamine, dms., c.l., dlvd lb. .965 - —
dms., c.l., dlvd. lb. .995 - —
tanks, dlvd. lb. .96 - —
Monobutylamine, dms., c.l., dlvd. E. of Rockies lb. .57½- —
dms., l.c.l., same basis lb. .59 - —
tanks, same basis lb. .55 - —
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 - —
dms., l.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 - —
dms., l.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Monochloracetic acid, purif. (see Chloroacetic acid, mono).
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E lb. .10½- —
dms., l.c.l., same basis lb. .11½- —
tanks, same basis lb. .08¾- —
Monoethanolamine, dms., c.l., dlvd. E lb. .27½- —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Monoetnyialphanaphthylamine (see
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd. E. 100% basis lb. .38½- —
dms., l.c.l., dlvd. E., 100% basis. lb. .40 - —
tanks, dlvd. E., 100% basis lb. .35 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidine (see N-Ethyl-o-toluidine)
Monoisopropanolamine, dms., c.l., dlvd. E lb. .27½- —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb. .32½- —
dms., l.c.l., same basis lb. .35 - —
tanks, same basis lb. .31 - —
Monomethylamine, anhyd., cyls., l.c.l., frt. equald., 100% basis lb. .30 - —
tanks, 100% basis lb. .26 - —
30-35% soln., dms., c.l., frt. equald., 100% basis lb. .36 - —

METHANOL...Large scale production controlled to the highest purity, plus over 50 years experience in the manufacture of organic chemicals, makes Heyden Newport an important source for this versatile alcohol.

District sales offices located in the nation's major distribution areas will service your methanol requirements promptly from... California, 1001 E. First Street, Los Angeles 12; 420 Market Street, San Francisco 11... Georgia, 254 Paces Ferry Road, Atlanta 5 ... Illinois, 20 North Wacker Drive, Chicago 6... Michigan, 10600 Puritan Avenue, Detroit 38... New Jersey, 1 Virginia Street, Newark 12... New York, Main Office, 342 Madison Avenue, New York 17... Ohio, 1433 East McMillan Street, Cincinnati 6... Pennsylvania, 7 Wynnewood Road, Wynnewood... Rhode Island, 511 Westminster Street, Providence 3 ...Texas, 2444 Times Boulevard, Houston 5. 1958

FINE HEYDEN CHEMICALS

HEYDEN CHEMICAL DIVISION

Heyden Newport Chemical Corp., 342 Madison Ave., New York 17, New York

HEYDEN NEWPORT

Monomethylamine, 30-35% soln., dms., t.e.l., frt. equald, 100% basis	lb.	.36½	—
tanks, frt. equald., 100% basis	lb.	.26	—
40% soln., dms., frt. equald., 100% basis	lb.	.33	—
dms., t.e.l., frt. equald., 100% basis	lb.	.33½	—
tanks, frt. equald, 100% basis	lb.	.26	—
Monopentaerythritol, tech., bgs., c.l., dlvd. E	lb.	.31	—
bgs., t.c.l., dlvd. E	lb.	.32	—
Monopotassium glutamate, dms., 1,000-lb lots, frt alld	lb	3.05	—
dms., 100-lb lots, same basis	lb	3.25	—
Monosodium glutamate, dms., dlvd.	lb.	1.07	1.15
Monosodium phosphate (see sodium phosphate, monobasic).			
Montan wax, Calif., refd., bgs	lb.	.27	.28
Imp., crude, Bohemian, bgs	lb.	.21	.22
German, bgs	lb.	.25	.26
Morphine, cns., 100-oz., f.o.b. works	oz.	12.35	—
Morphine hydrobromide, cns., 100-oz., f.o.b. works	oz	9.90	—
Morphine hydrochloride, NF, cns., 100-oz., f.o.b. works	oz.	9.90	—
Morphine sulfate, USP, cns., 100-oz., f.o.b works	oz.	9.90	—
Morpholine, dms., c.l., dlvd. E	lb.	.55¼	—
dms., t.c.l., dlvd. E	lb.	.56¼	—
tanks, dlvd E	lb.	.52¾	—
Muriatic acid (see Hydrochloric acid).			
Musk, syn., ambrette, fib, dms., 100-lb lots	lb	4.40	4.90
cns., 25-lb lots	lb	4.50	5.00
Ketone fib, dms., 100-lb. lots	lb	4.60	5.10
cns., 25-lb lots	lb	4.70	5.20
Xylol, fib, dms., 100-lb. lots	lb.	1.26	—
cns., 25-lb lots	lb.	1.40	—
Mustard seed, Danish, yellow, bgs.	lb.	.14	—
Montana, yellow, bgs	lb.	.10½	—
Oriental, bgs	lb.	08	—
Mustard, oil, syn., bots	lb.	1.60	1.85
Myristic acid, bgs	lb.	.26¾	.29¼
tanks	lb.	.25¾	—
Myrrh gum, cs	lb.	.65	.75

N

Naphtha, high solvency (see Solvent naphtha, petroleum).			
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).			
Naphtha, VM&P, petroleum, tankcars, New Jersey and New York	gal.	.19	—
Group 3	gal.	.13875	—
Houston, Texas	gal.	.155	—
Naphthalene, crude, dom., 78°, tanks, frt. equald	lb.	.06	—
imp., 78°, bgs., large lots	lb.	.09½	Nom.
Refd., indust chipped, crushed, bgs., frt. equald	lb.	.13½	—
tanks, same basis	lb.	.10¾	—
Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis.	lb.	.15½	—
cs., 50 lbs., c.l., same basis.	lb.	.15¾	—
1-lb. pkgs., c.l., same basis.	lb.	.18½	—
a-Naphthol, dms., frt. alld	lb.	1.02	—
b-Naphthol, tech., flake, bbls., c.l., works	lb.	.34	—
bbls., t.c.l., works	lb.	.36	—
Naphthol, ITR, red toner, bbls., works	lb.	5.00	—
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).			
1-Naphthol-4 sulfonic acid (see Neville and Winther's acid).			
1-Naphthol-5-sulfonic acid (see L acid).			
1-Naphthol-5-sulfonic 8-amino acid (see S acid).			
2-Naphthol-6,8-disulfonic acid (see Gamma acid).			
Naphthol sulfonic mixed acid (see Cleve's acid).			
a-Naphthylamine, dms., frt. alld	lb.	.52	—
b-Naphthylamine, tech., flake, bbls., works	lb.	1.60	—
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).			
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).			
2-Naphthylamine-1-sulfonic acid (see Tobias acid).			
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).			
2-Naphthylamine-7-sulfonic acid (see F acid).			
Naringin, fib, dms.	lb.	8.50	—
Neatsfoot oil, 15° cold test, dms	lb.	.29	Nom.
20° cold test, dms.	lb.	.28	Nom.
30° cold test, dms.	lb.	.27	Nom.
Neocinchophen, USP, dms., frt. adjusted	lb.	7.00	8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity	gram.	.25	—
fib. dms., 100-999-gram lots, basis activity	gram.	.30	—
Tech., fib. dms.	gram.	.13½	—
Neopentylglycol, dms., c.l., dlvd	lb.	.32	—
dms., t.c.l., same basis	lb.	.33	—
Nerol, dms.	lb	4.75	—
Neroli oil, NF, French, bots	lb.	425.00	575.00
Tunisian, bots.	lb.	400.00	—
Nerolin, cns.	lb.	2.45	2.85
Neville and Winther's acid, dms., frt. alld	lb.	1.40	—
Niacinamide (see Nicotinamide).			
Nickel acetate, bbls., dlvd.	lb.	.68½	.75½
Nickel carbonate, bbls., dlvd	lb.	78¼	.85¼
Nickel chloride, bbls., dlvd.	lb.	.37	.45
Nickel formate, bbls., ton lots, frt. alld	lb.	.72	.73
Nickel metal, electro cathodes, cs., works	lb	.74	—
Nickel nitrate, dms., frt. alld	lb.	.31½	.33½
Nickel oxide, black, bbls.	lb.	.85	—
Green, bbls.	lb.	.84	—
Nickel sulfate, bgs., c.l., dlvd	lb.	.28	—
bgs., t.c.l., dlvd.	lb.	.28½	.36
Nicotinamide, USP, 50-kilo., dms., 100 kilos., dlvd	kilo.	6.50	—
dms., less than 100 kilos, dlvd.	kilo.	6.60	7.00
Nicotine sulfate, 40%, dealers, 50-lb. dms. frt. alld	lb.	1.20	—
40%, manufacturers, 500-lb. dms., frt. alld	lb.	1.05	—
Nicotinic amide, USP (see Nicotinamide).			
Niger seed, bgs.	lb.	.10¼	—
Nikethamide, cbys.	lb.	5.00	—
Nitric acid, 36° Be., cbys., c.l., works E 100 lbs.		5.75	—
cbys., t.c.l., works E 100 lbs.		6.05	6.85
38° Be., cbys., c.l., works E. 100 lbs.		6.25	—
cbys., t.c.l., works E 100 lbs.		6.55	7.35
40° Be., cbys., c.l., works E. 100 lbs.		6.75	—
cbys., t.c.l., works E 100 lbs.		7.05	7.85
42° Be., cbys., c.l., works E. 100 lbs.		7.25	—
cbys., t.c.l., works E 100 lbs.		7.55	8.35
58.5 to 68%, HNO_3, tanks, works, 100% basis 100 lbs.		3.90	—
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs.		4.90	—
Nitric acid, CP, NF, consumer, cbys., extra, c.l., works	lb.	.18½	—
cbys., extra, t.c.l., works	lb.	.20	—
5-pint bots., extra, cs., c.l., same basis	lb.	.22½	—
5-pint bots, extra, cs., t.c.l., same basis	lb.	.24	.25
dms., frt alld	lb.	.99	—
m-Nitroaniline, cryst., dms., frt. alld	lb.	1.15	—
Paste, dms., frt. alld., 100% basis	lb.	1.10	—
o-Nitroaniline, flaked, dms, t.l., frt. alld	lb.	.49	—
dms., t.t.l., frt alld	lb.	.51	—
o-Nitroaniline orange toner, kgs.	lb	1.35	—
p-Nitroaniline, c.l., t.l., dms., frt. alld	lb.	.445	—
dms., t.c.l., same basis	lb.	.46½	—
o-Nitroanisole, tech., tanks, frt alld.	lb.	.36	—
p-Nitroanisole, tech., solid, dms., frt alld	lb.	.72	—
Nitrobenzene, dbl dist., dms., c.l., frt alld	lb.	.13	—
dms., t.c.l., frt. alld	lb.	.14	—
tanks, frt. alld	lb.	.11	—
p-Nitrobenzoic acid, dms., c.l., works	lb.	.63	—
4-Nitro-2-aminophenol, tech., paste, dms., t.c.l., works	lb.	.64	—
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works	lb.	.37½	—
bbls., t.c.l., same basis	lb.	.33½	.40½
18-20, cps., bbls., c.l., same basis	lb.	.39½	—
bbls., t.c.l., same basis	lb.	.40½	.42½
250-400, 600-1,000 seconds, bbls., t.c.l., same basis	lb.	.43	.46
Nitrocellulose, spirit soluble, 30-35 cps., ¼, ½ seconds, bbls., c.l., same basis	lb.	.43	—
bbls., t.c.l., same basis	lb.	.44	.46
5-6 cps., 40-60 seconds, bbls., c.l., same basis	lb.	.42	—
bbls., t.c.l., same basis	lb.	.43	.45
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable			
o-Nitrochlorobenzene dms. c.l., frt. alld	lb.	.15	—
dms., t.c.l., same basis	lb.	.16	—
tanks, same basis	lb.	.13	—
p-Nitrochlorobenzene dms.	lb.	.26	.27
2-Nitro-p-cresol, tech., dms., dlvd	lb	.88	—
Nitroethane, dms., c.l., dlvd. E	lb.	.25	—
dms., t.c.l., dlvd E	lb.	.26½	—
tanks, dlvd E	lb.	.22½	—
Nitroethane prices West of Rockies are 1c. higher.			
Nitrogen solutions, tanks, f.o.b. works	ton.	164.00	—
Nitrogen tetroxide, indust., tankcars, f.o.b. Hopewell, Va	lb.	.065	—
Cyls., t.l., min 5 tons, same basis	lb.	.07½	—
Cyls., t.c.l., t.t.l. same basis	lb.	.15	—
Nitrogenous process tankage, bulk, works	unit-ton	4.50	5.00
Nitrogenous sewage sludge, bulk, f.o.b. Chicago works	unit-ton.	2.95	—
Nitromethane dms. t.l., dlvd. E	lb.	.25	—
dms. t.l.l., dlvd E	lb.	.26½	—
Nitromethane prices West of Rockies are 1c higher			
a-Nitronaphthalene, bbls., frt. alld.	lb.	.31	—
o-Nitrophenol, dms., works, frt. equald	lb	.94	—
p-Nitrophenol, dms., c.l., frt alld.	lb	.45	—
dms. t.c.l. frt alld	lb.	.47	—
1-Nitropropane dms. c.l., frt. alld. E of Rockies	lb	23½	—
dms., t.c.l., same basis	lb	.25	—
tanks, same basis	lb	.21	—
2-Nitropropane dms. c.l. frt. alld. E of Rockies	lb	.18½	—
dms., t.c.l., same basis	lb	.20	—
tanks, same basis	lb	.16	—
Nitropropane prices West of Rockies are 1c. per lb higher.			
m-Nitrotoluene tech. dms., frt. alld.	lb.	.50	—
o-Nitrotoluene, dms., c.l., frt. alld	lb	.15	—
dms. t.c.l., frt alld.	lb.	.16	—
tanks, frt. alld.	lb.	.13	—
p-Nitrotoluene, tech., cast, dms., c.l., works	lb.	.27½	—
dms. t.c.l. works	lb.	.28	—
flake, dms., c.l., t.l., works	lb.	.27½	—
dms. t.c.l., works	lb.	.28	—
m-Nitro-p-toluidine, dms.	lb.	1.25	—

Basic Chemicals From Reichhold

FORMALDEHYDE_
An important raw material in the manufacture of resins, adhesives, textiles, leather, rubber and numerous other products. It is marketed by RCI in five different concentrations.

METHANOL_
A widely used solvent and chemical intermediate for the manufacture of formaldehyde, rocket fuels, amines and esters.

PENTACHLOROPHENOL_
Used in various fungicides, bactericides, algicides and herbicides; in agriculture, lumber, pulp and paper applications.

PHENOL_
A building block in the plastics industry. Also widely used in the intermediates required for the production of synthetic detergents, lubricating oil additives, insecticides, bactericides and pharmaceuticals.

SODIUM PENTACHLOROPHENATE_
The water soluble salt of penta used to prevent microbiological attack on such organic substances as wood, adhesives, protein materials.

MALEIC ANHYDRIDE_
Principally used in the manufacture of synthetic resins, synthetic drying oils, and related products. Its highly reactive structure lends itself to the synthesis of complex organic chemicals by the Diels-Alder Process.

ORTHOPHENYLPHENOL_
A very effective fungicide and bactericide used in many industrial applications for outstanding preservation.

HYDROCHLORIC ACID_
Has wide application in the chemical industry for pickling and cleaning metals, processing textiles, refining ores and in the manufacture of chemicals generally.

Creative Chemistry . . . Your Partner in Progress

RCI

PENTAERYTHRITOL_
Used primarily in the manufacture of alkyd resins. Imparts better film properties such as high gloss and gloss retention, good durability, faster drying. Used also in ester gums and synthetic drying aids.

PHTHALIC ANHYDRIDE_
Used extensively in the manufacture of alkyd resins, plasticizers, organic pigments and dyestuffs, and pharmaceuticals, as well as other fine chemical intermediates.

SODIUM SULFITE_
Primarily used by the paper industry in the manufacture of kraft paper and fiber board by the semi-chemical hard wood process.

SULFURIC ACID_
A basic commodity used in the paper, dye and pigment, textile, fertilizer and organic chemical industries.

REICHHOLD
REICHHOLD CHEMICALS, INC., RCI BUILDING, WHITE PLAINS, N.Y.

Nonylphenol, dms., c.l, frt. alld. lb. .22½- —
dms., l.c.l., frt. alld lb. .23½- —
tanks, frt. alld lb. .20 - —

Nonylphenol prices on shipments to Western States are 2c. higher.

Nutmegs, East Indian, whole, bgs. lb. 1.34 - 1.35
West Indian, bgs. lb. 1.28 - 1.29
Nutmeg oil, USP, dist., East Indian, cns lb. 9.00 -12.00
West Indian, cns. lb. 9.00 -12.00
Nux vomica, bls. lb. .20 - —
Powd., bbls., bxs. lb. .20 - .22

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms lb. .45 - .48
Octanol, decanol, tanks, bayonne, N.J. gal. .20 - —
Borger, Tex. gal. .15¾- —
1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .43½- —
dms., l.c.l., dlvd. Zone 1—lb. .45½- —
tanks, dlvd., Zone 1 lb. .41 - —
Octyl alcohol, perfumers grade, bots. lb. 1.00 - 3.25
Octyl alcohol, tech, (see 1-Octanol, tech).
tert-Octylamine, dms., c.l., t.l., f.o.b. works lb. .54½- —
dms., l.c.l., same basis lb. .55 - —
Octylphenol, bgs., c.l., works lb. .22½- —
bgs., l.c.l., works lb. .23 - —
tanks, works lb. .21½- —
Octylphenol in dms., 1lc. higher.

OILS

Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms lb. .16 - .16½
tanks lb. .14 - —
Oleic acid, dbl.-dist. (white), dms lb. 17 - .19½
tanks lb. .14½- —
S. D., dms. lb. .16 - .18½
tanks lb. .13½- —
Oleo oil, extra, dms. lb. .14½- .14¾
Oleostearine, dms. lb. .12½- .12¾
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs lb. .15 - .20
Tears, cs. lb. .22 - .30
Olibanum oil, bots lb 5.00 7.65
Extra fine, bots lb 8.00 9.50
Olive oil, edible, dms., spot, duty-paid gal. 2.25 - 2.35
Olivine, crude, works ton.12.00 —
20 mesh, works ton.15.00 - —
100 mesh works ton.20.00 - —
Opium, USP, cns., 25-lbs., f.o.b. works oz.19.20 - —
gran., cns., 50 lbs., same basis oz.21.65 - —
powd., cns., 50 lbs., same basis oz.21.65 - —
Orange oil, expressed, USP, Calif., cns., dms lb. .70 - .90
Calif., sweet., cns., dms lb. .60 - —
Florida, cns., dms. lb. .45 - .50
Messina, cns. lb. 3.25 - 5.00
West Indian, bitter, cns., dms., lb. 2.50 - 3.50
Orange peel, bitter, Haitian, bls lb. .18 - .20
Sweet lb. .28 - .30
Origanum oil, Spanish, cns lb. 1.80 - 2.30

ORANGE PIGMENTS

Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Orris root, Florentine, bls lb .55 - —
powd., bbls., bxs lb. .65 - —
Verona, bls lb. .35 - —
powd., bbls., bxs lb. .45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol)
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine).
Ouabain, USP, bots. gram 3.00 4.00
Ouricury wax, crude, bgs. lb. .54 - .55
Refd., pure, bgs. lb. .60 - .62
Oxalic acid, bgs., c.l., works lb. .18 - —
bgs., 10,000-lb. lots, works lb. .19 - —
bgs., smaller lots, works lb. .20½- —
Oxalic acid in drums is priced ½c. per lb. higher.
b-Oxynapnthoic acid, pigment manufacture, dms., frt. alld lb. .912 - —
Dyestuff manufacture, dms., same basis lb. 1.03 - 1.14
Oxyquinolin sulfate, cns., 100-lb. lots, works lb 4.75 - 5.00
cns., smaller lots, works lb. 4.92 - 5.17

P

Palm oil, clarif., dms lb. .1440- .1540
tanks lb. .1150- —
Palm oil acid, doub'e dist., dms. lb. .15¼- .17¾
single dist., dms lb .14¾- .17¼
tanks lb. .12¼- —
Palmarosa oil, cns. lb. 4.45 6.00
Papain, powd., bots. lb. 5.50 -10.00
Papaverine hydrochloride, nat. or syn., USP, cns., 25-oz. to 100-oz. lots oz. 5.00 - —
cns., smaller lots oz. 5.05 - 5.20
Papaverine sulfate, nat. or syn., USP, cns oz. 7.00 - 7.35
Paprika, Bulgarian, bgs. lb. .27 - —
Hungarian, bgs. lb. .50 - —
Spanish, bgs lb. .33 - —
Yugoslavian, bgs. lb. .29 - .30
Para-aminobenzoic acid (see p-Aminobenzoic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachlorophenol (see p-Chlorophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls. lb. 1.21 - —
Chlorinated, kgs. lb. 1.36 - —
Paraffin, crude, scale, white, 123°-127°F., ASTM, tanks, refy. lb. .0655- —
Paraffin, fully refd., 122°-124°F., ASTM, tanks, refy lb. .0765- —
125°-127°F., ASTM, tanks, refy. lb. .0765- —
130°-132°F., ASTM, tanks, refy. lb. .0765- —
132°-134°F., ASTM, tanks, refy. lb. .0765- —
135°-137°F., ASTM, tanks, refy. lb. .0765- —

AMP temperatures are an arbitrary 3°F. higher than ASTM.

Paraffin oil, pale, 100-110 vis., at 100°F., tanks east coast refy gal. .14 - —
Paraffin wax (see Paraffin).
Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld lb. .10 - —
bgs., l.c.l., frt. alld lb. .12 - .13
91%, powd., bgs., c.l., ex whse. lb. .1715- —
bgs., l.c.l., ex whse lb. .1865- —
USP-X, fib. dms., c.l. lb. .19 - —
fib. dms., 1,000-lb. lots lb. .20 - —
fib. dms., smaller lots lb. .21½- —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd lb. .14 - —
55-gal. dms., l.c.l., dlvd lb. .15 - —
tanks, dlvd. lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, ethyl, dms., frt. alld lb. .84 - —

Parathion prices 2c. per lb. higher in West.

Paratoluenesulfonamide (see p-Toluenesulfonamide).
Passion flower herb, bls lb. .35 - .40
Patchouli oil, imp., cns. lb. 5.60 - 6.50
Peach kernel oil, USP (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd. E. of Rockies lb. 1.00 - —

Peacock blue price 1c. higher W. of Rockies.

Peanut meal, old process, 45%, bgs., f.o.b. mills ton.57.00 -60.00
solvent, same basis ton.55.00 Nom.
Peanut oil, crude, tanks, f.o.b. mills. lb. .15½- —
Refd., dms. lb. .20¾- .21
tanks lb. .18¾- —
Pectin, dom., NF, citrus, powd., bbls. lb. 2.05 - 2.06
Dom., tech., powd., 150 jelly grade, bbls lb. 1.28 - —
Imp., Danish, bbls., ex whse lb. 1.28 - —
Pelargonic acid, dms., c.l., dlvd lb. .25 - —
ton lots, same basis lb. .27½- —
tanks, same basis lb. .23½- —
Penicillin, potassium, cryst., bulk, 1,000,000 units. .021 - —
Penicillin, procaine, cryst., bulk, 1,000,000 units. .023 - —
Pennyroyal oil, USP, imported, cns. lb. 1.95 - 2.70
Pentachlorophenol, bgs., c.l., t.l., works, frt. equald lb. .21 - —
bgs., l.c.l., same basis lb. .22½- .29
Pentachlorophenol in dms. 1c. higher.
Pentaerythritol, tech., bgs., c.l., dlvd lb. .31 - —
bgs., l.c.l., dlvd. lb. .32 - —
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex. refy, gal. .14 - —
Pentobarbital, dms., 100 lbs. or more lb. 6.00 - —
Pepper, black, Malabar, bgs lb. .51 - —
Lampong, bgs. lb. .51 - —
Red, Funtuas, bgs. lb. .32 - —
Japanese, Hontoka, bgs. lb. .37½- —
Santaka, bgs. lb. .31½- —
Sudanese, bgs. lb. .36 - —
White, Muntok, bgs. lb. .78 - —
Peppermint leaves, dom., USP, bls., dms lb. .70 - .75
Imp., USP, bls. lb. .85 - —
Peppermint oil, nat., dms lb. 4.40 - —
Redist., USP, dms lb. 4.75 - —
Perchloroethylene, dms., c.l., or t.l., dlvd lb. .13½- —
dms., l.c.l., dlvd. lb. .15¼- —
tanks, dlvd. lb. .11¾- —
tanktruck, 1,000 gal. min. dlvd lb. .12¼- —
Peri acid, dry, bbls., frt. alld lb. 1.60 - —
Paste, bbls., frt. alld lb. 1.55 - —
Peru balsam, dms. lb. 1.10 - 1.50
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil, South American, cns., dms lb. 2.40 - —
Petrolatum, cream, dms., c.l., refy. lb. .08125- —
dms., l.c.l., dlvd. lb. .10125-.11375
tanks, refy. lb. .05875- —
Extra amber, dms., c.l., refy lb. .07125- —
dms., l.c.l., dlvd. lb. .09125-.10375
tanks, refy. lb. .04875- —
Petrolatum, lily white, dms., c.l., refy lb. .08625- —
dms., l.c.l., dlvd. lb. .10625- .12
tanks, refy. lb. .03735- —
USP, snow white, dms., c.l., refy. lb. .09125- —
dms., l.c.l., dlvd 4b. .11125- .125
tanks, refy. lb. .06875- —
Petrolatum, USP, soft yellow, dms., c.l., refy lb. .07125- —
dms., l.c.l., dlvd. lb. .095 - .10375
tanks, refy. lb. .04875- —
Petroleum pitch (see Asphalt, petroleum).

PETROLEUM PRODUCTS

Petroleum product quotations are listed individually For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works. lb. .16½- .18¾
non-ret. dms., l.c.l., works lb. .17½- .19
tanks, works lb. .14½- .17
50-55%, sulfuric content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., l.c.l., works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine, dms., c.l., frt. alld, E. lb .91 - —
dms., l.c.l., same basis lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld, lb. 1.05 - —
dms., same basis lb. 1.08 - —
Phenobarbitol, USP, dms., 100-lbs., frt. alld lb. 3.25 - —
Phenobarbital-Sodium (see sodium phenobarbital).
Phenol, 90-92% (cresol 8-10%), non-ret. dms., frt. alld. E. of Rockies lb. .16¾- —
non-ret. dms., l.c.l., same basis. lb. .17¾- —
tanks, same basis lb. .14¾- —
82-84% (cresol 16-18%) non-ret. dms., c.l., same basis lb. .16½- —
non-ret dms., l.c.l., same basis. lb. .17½- —
tanks, same basis lb. .14½- —
30°C., or above, tar dist., non-ret. dms., c.l., same basis lb. .18 - —
Phenol, 30°C., or above, tar dist., non-ret. dms., l.c.l., same basis. lb .19 - —
tanks, same basis lb. .16 - —
USP, syn., dms., c.l., t.l., frt. alld lb. .18½- —
dms., same basis lo. .20½- —
tanks, same basis lb. .16½- —
Phenolphthalein, USP or yellow, 250-lb. dm., 2,000 lbs., frt. alld lb. 1.30 - —
250-lb. dm., same basis lb. 1.35 - —
Phenothiazine drench, fib. dms., t.l., dlvd lb. .44 - —
fib. dms., l.t.l., same basis lb .47 - —
NF, fib. dms., t.l., same basis lb. .43 - —
fib. dms., l.t.l. same basis lb. .46 - —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Phenyl salicylate (see Salol).
Phenylacetaldehyde, soln., 50%, bots. lb. 2.35 - —
100%, bots. lb. 4.00 - 4.65
Phenylacetic acid, pure, cryst., cns. lb. 1.25 - 1.75
dl-Phenylalanine, dms., works lb.27.00 -37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib. dms., 200-lb. lots, dlvd. E lb. 3.45 - —
fib dms., smaller lots, dlvd. E lb. 3.80 - —
N-Phenyidiethanolamine, dms., c.l., dlvd. E lb. .41 - —
dms., l.c.l., dlvd. E. lb. .42½- —
tanks, dlvd. E. lb. .38½- —
m-Phenylenediamine, dms., frt. alld. lb. 1.10 - —
o-Phenylenediamine, coml, fib. dms, 100 to 1,000 lbs., works. lb. 1.70 - 1.80
p-Phenylenediamine, tech., dms, works lb. 1.55 - —
Phenylethanolamine, dms., c.l., works lb. .75½- —
dms., l.c.l., same basis lb. .77 - —
Phenylethyl acetate, bots. lb. 1.25 - 1.40
2-Phenylethyl alcohol, extra, dms. lb. 1.14 - 1.50
Standard, dms. lb. 1.10 - 1.60
b-Phenylethylamine, dms., 20,000 lbs. or more, frt. alld lb. 1.50 - —
dms., smaller lots, frt. alld lb. 1.70 - 1.85
Phenylethylphenyl acetate, bots lb. 4.00 - 4.25
Phenylglyconic acid (see Mendelic acid).
Phenylhydrazine 97%, 450-lb. dms. lb. 1.45 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd. E. lb. 1.80 - —
fib. dms., smaller lots, dlvd. E. lb. 2.10 - —
o-Phenylphenol, dms., l.c.l., works. lb. .48 - .50
p-Phenylphenol, bgs., c.l., works lb. .38½- —
bgs., l.c.l., works lb. .43 - —
Philippine copal gum, pale, chips, bgs lb. .23¾- .26
nubs, bgs. lb. .33¼- .37
seeds, bgs. lb. .20 Nom.
sorts, bgs. lb. .20 - .24
Phloroglucinol, coml., fib. dms., works lb. 6.40 - —
CP, bots., works lb.17.75 - —
Tech., fib dms., works lb.10.45 - —
Phloxin red toner (see Eosin red toner).
Phosgene, ret. cyls., works lb. .15½- —
Phosphate, defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports, New Orleans ton.48.00 - —
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines. short-ton. 5.298 - —
68-70%, b.p.l., bulk, c.l., same basis short-ton. 5.648 - —
70-72%, b.p.l., bulk, c.l., same basis short-ton. 6.228 - —
74-75%, b.p.l., bulk, c.l., same basis short-ton. 7.128 - —
76-77%, b.p.l., c.l., bulk, same basis short ton. 8.018 - —

Above Florida prices are based on fuel oil at $2.37 per bbl. and labor at $1.59.

Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald 100 lbs. 7.00 - —
cbys., l.c.l., same basis 100 lbs. 7.25 - 7.75
tanks, t.w., works 100 lbs. 5.60 - —
80%, cbys., c.l., frt. equald 100 lbs. 7.85 - —
cbys., l.c.l., works 100 lbs. 8.10 - 9.35
tanks, t.w., works 100 lbs. 6.00 - —
NF, 85%, cbys., c.l., works 100 lbs. 8.50 - —
cbys., l.c.l., works 100 lbs. 8.75 - 9.00
tanks, t.w., works 100 lbs. 6.65 - —
Phosphorus, amorpn., red, dms., t.l., works lb. .55 - —
dms., smaller lots, works lb. .56 - .57
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 - .20½
dms., l.c.l., works, frt. equald lb. .21½- —
tanks, works, frt. equald, lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works, frt. equald lb. .12½- —
Phosphorus pentasulfide, powd., dms., c.l., works lb. .13½- —
dms., l.c.l., works lb. .14½- .15½
Solid, dms., c.l., works lb. .11½- —
dms., l.c.l., works lb. .12½- .13½
Phosphorus pentoxide, dms., c.l., works lb. .1375- .1475
dms., l.c.l., works lb. .1475- .1675
Phosphorus sesquisulfide, dms., cs., c.l., works lb. .38 - —
dms., l.c.l., works lb. .39 - .40
Phosphorus trichloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .19 - .23
bgs., l.c.l., same basis lb. .20 - .24
tanks, same basis lb. .18½- .22½
Phthalimide, 97-98%, dms., frt. alld lb. .65 - —
Phthalocyanine blue, full strength, bbls., dlvd. E. of Rockies. lb. 2.90 - —
Resinated, bbls., same basis lb. 2.75 - —
Water dispersable, bbls., same basis lb. 1.52 - —

Pythalocyanine blue prices 1c. higher W. of Rockies.

Phthalocyanine green toner, bbls., works lb. 3.35 - —
Resinated, bbls. lb. 3.00 - —
Water dispersable, bbls. lb. 1.71 - —

Phthalocyanine green prices 1c. higher W. of Rockies.

Phthalylsulfacetamide, fib. dms., 1,000-lb. lots or more lb. 5.00 - —
NF, fib. dms. lb. 5.20 - —
a-Picoline, dms., c.l., works, frt. equald lb. .46 - .48
dms., l.c.l., works, frt. equald lb. .46½- .49
tanks, same basis lb. .43 - .46
b-Picoline, 98%, dms., t.l., works. lb. 1.05 - —
dms., l.c.l., same basis lb. 1.15 - —
tanks, same basis lb. .95 - —
b,g-Picoline, 5°C, dms., c.l., works. lb. .32½- —
dms., l.c.l., works lb. .33 - —
g-Picoline, dms., t.o.b., works lb. 1.60 - —
tanks, t.l., same basis lb. 1.50 - —
Picric acid, NF, bbls. lb. .85 - —
Tech., bbls. lb. .44 - —
Pigment green B, kgs. lb. 1.50 - —
Pilocarpine hydrochloride, USP, bots. oz. 5.25 - —
Pilocarpine nitrate, USP, bots., vials. oz. 5.15 - —
Pimento, Jamaincan, bgs. lb. .68½- —
Mexican, bgs lb. .56 - —
Pimento berry oil, NF, dms. lb 3.75 9.25
Pimento leaf oil, crude, cns lb. 2.40 - 2.60
Pine oil, dest.-dist., dms., l.c.l. works lb. .15 - —
dms., l.c.l. ex whse. New York. lb. .173 - —
Steam-dist., dms., ex whse., New York lb. .185 - —
dms., dlvd lb. .188 - —
Pineneedle oil, Siberian (see Abies Sibereca oil).
Pink root, bls. lb. 1.75 - —
Piperazine, anhyd., dms., c.l., frt. alld lb. 1.80 - —
dms., l.c.l., same basis lb. 1.85 - —
Piperazine citrate, 36%, dms., 1,000 lbs. or more, frt. alld lb. 1.15 - —
Piperazine dihydrochloride, 51%, dms., 1,000 lbs. or more, frt. alld lb. 1.23 - —
Piperazine hexahydrate, 44%, dms., 1,000 lbs or more, frt. alld lb. .86 - —
dms., 200-900 lbs., frt. alld lb. .89 - —
Piperazine phosphate, 42%, dms., 1,000 lbs. or more, frt. alld lb. 1.06 - —
Piperidine, dist., 98% min., dms., c.l., frt. equald lb. 2.55 - —
Piperonyl butoxide, dms., dlvd. E.lb. 4.50 - 5.05

PITCHES

Pitch quotations are listed individually For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Platinum metal, works oz.81.00 -85.00
Pleurisy root, bls. lb. .45 - .50
Podophyllum resin, NF, dms. lb.12.50 - —
Poke root, bls. lb. .19 - .22
Polymyxin, bots., bulk., 50 billion units or more 1,000,000 units. .52 - —
bulk, bots., 25-50 billion units. 1,000,000 units. .54 - —
bulk, bots., 1-25 billion units. 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Pontianak copal gum, chips, bgs lb. .25 - —
Nubs, bgs. lb. .37 - .40
Poppy seed, Argentine, bgs. lb. No stocks.
Dutch, bgs. lb. .18 - —
Danish, bgs. lb. .16½- —
Polish, bgs. lb. .17½- —
Turkish, bgs. lb. .13½- —
Potash, caustic, liq., 45% basis, dms., c.l., works 100 lbs. 4.25 - —
dms., l.c.l., same basis 100 lbs. 5.25 - —
tanks, same basis 100 lbs. 3.70 - —
reg., flake, 88-92%, dms., c.l., same basis 100 lbs. 9.55 - —
reg., flake, 88-92%, dms., l.c.l., same basis 100 lbs.11.05 - —
solid, 88-92%, dms., c.l., works. 100 lbs. 9.10 - —
dms., l.c.l., works 100 lbs.10.60 - —
Potassium acetate, NF, 200-lb. dm., f.o.b. works, E lb. .31 - —
Potassium bicarbonate, USP, gran, dms lb. .22 - —
powd., dms. lb. .24 - —
Potassium bichromate, gran., bgs., c.l., t.l., works lb. .18 - —
bgs., l.c.l., works lb. .18½- .19¼

Potassium bichromate in dms. ½c. higher.

Potassium bitartrate, NF, gran., powd., 100-lb. bgs., c.l., frt. equald lb. .37 - —
100-lb. bgs., 5,000 lbs., 1 shipt., same basis lb. .38 - —
100-lb. bgs., smaller lots, same basis lb. .40 - —
Potassium borohydride, powd., dms., works lb.16.00 -22.00

Pelletized potassium borohydride $1.25 per lb. higher in 1,000-lb. lots.

Potassium bromate, 200-lb. dms., c.l., frt. alld lb. .49 - —
Potassium bromide, USP, gran., bbls., kgs lb. .39 - .40
Potassium carbonate, dom., NF, gran., bbls., dms lb. .20 - —
Dom., tech., powd., bbls., dms lb. .21 - .22
Dom., calcinated, bgs., c.l., works. 100 lbs. 8.50 - —
bgs., l.c.l., same basis 100 lbs. 9.55 - —
Dom., hydrated, 83-85%, bgs., c.l., works 100 lbs. 7.10 - —
bgs., l.c.l., works 100 lbs. 8.15 - —
Potassium chlorate, cryst., dms., c.l., works lb. .12¼- —
dms., l.c.l., works lb. .13½- .14¼
Powd., dms., c.l., works lb. .12¾- —
dms., l.c.l., works lb. .14 - .15
works lb. .12¼- —
Potassium chlorate, NF, cryst., dms., 2,000 lbs. or more, works lb. .16¾- —
NF, gran., 25-lb. metal dms lb. .36 - —
NF, powd., dms., 2,000 lbs. or more, works lb. .17¼- —
Potassium chloride, indust., 99.9% KCL, bulk, c.l., works ton.29.00 - —
bgs., c.l., works ton.33.50 - —
99.3% KCL, bulk, c.l., works. ton.28.00 - —
bgs., c.l., works lb.32.50 - —
USP, cryst., dms. lb. .20 - .22
USP, gran., dms. lb. .21 - .23
USP, powd., dms. lb. .24 - .26
Potassium chloride agricultural (see Potassium muriate).
Potassium chromate, tech., dms., works lb. .50 - .51
Potassium citrate, NF, gran., 250-lb. dms., f.o.b. works E lb. .43 - —
powd., 250-lb dms., same basis. lb. .46 - —

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U.S.I. CHEMICAL NEWS

October ★ A Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1960

National Distillers Joins Shell International in Polyolefin Venture Abroad

A joint company has been formed by Shell International Chemical Company Ltd., London, and U.S.I.'s parent company, National Distillers, to develop plans for production and marketing of polyolefin film and packaging materials outside the U.S. and Canada. The new company operates from London.

National Distillers is one of the world's largest producers of polyethylene and owns the Kordite Company—a leading manufacturer in the U.S. of plastic film and packaging. It has recently set up a company in Switzerland to cover sales and development of polyethylene.

New Direct Halogenation Process Converts Impure Metal to Purified Halide

A safe and commercially adaptable process for the direct halogenation of crude metals—to obtain the corresponding halide substantially free of certain undesirable metal impurities—is covered in a patent recently issued to U.S.I.'s parent company, National Distillers. Metal halides which can be prepared by this process are those of the reactive metals such as titanium, zirconium, hafnium, columbium and tantalum.

As described in the patent, an impure feed such as scrap zirconium is safely reacted with a halogen gas by diluting the latter with an explosion-preventing proportion of helium, argon or neon. The reaction is carried out at 450°-900°C until 50-90% of the feed has been reacted. A metal halide is recovered which is considerably lower in metal impurity content than the original scrap feed. A typical analysis of $ZrCl_4$ prepared by this process is given in the following table:

COMPARATIVE METAL IMPURITY CONTENTS—METAL FEED VERSUS HALIDE PRODUCT

Metal Impurity	Low Hafnium Zirconium Scrap Feed*	$ZrCl_4$ Product*
Al	65	94
Cd	<0.5	0.8
Cr	700	35
Fe	970	140
Mn	23	< 5
Ni	255	<15
Pb	85	20
Sn	1.6%	188
Ti	< 20	<20
U	< 10	<10
W	< 20	<20

* Values in ppm based on zirconium unless otherwise stated.

Ammonia Production, Storage Capacity Expanded by U.S.I.

Refrigerated, Non-Pressurized Storage Tank to be Installed

Ammonia production capacity has been increased by 17%, and anhydrous ammonia storage capacity will soon be expanded by U.S.I. at its Tuscola, Illinois, plant. The plant is already operating at the expanded rate of 70,000 tons per year (up from 60,000 tons) and a new 6,000-ton storage facility is expected to be in full service by the end of the year.

This increased production and storage capacity are needed to assure rapid delivery to U.S.I.'s ammonia, aqua ammonia and nitrogen solutions customers, especially during the heavy seasonal demand in early spring. Because of the plant's location in Central Illinois, heart of the Midwestern fertilizer industry, most of its output is used as a raw material in this highly seasonal business. Other applications for U.S.I. ammonia include chemical processing, refrigeration and miscellaneous industrial uses.

Storage Tank Uses New Principle

The new 6,000-ton storage tank will use the relatively new principle of storing refrigerated ammonia at atmospheric pressure, rather than storing in pressurized tanks at moderate temperatures. The storage vessel consists of an inner tank, 88 feet in diameter and 56 feet high, separated from an outer tank by 2½ feet of insulation. Liquid ammonia is stored in the tank at a temperature of about −28°F. and this low temperature is maintained by evaporation of ammonia from the surface.

The evaporated ammonia is recompressed, condensed and returned to the tank. It can also be used as feed stock for the adjoining ammonium nitrate plant.

Polyethylene — Aggregate Forms New Paving Material

A new paving material compounded of pigmented polyethylene and aggregate promises to bring color-coding of roads and runways closer to reality. It can be mixed and applied (in a one-inch layer) using conventional machinery and methods. Brilliant white test curbing, shown being installed in the photo above, defines road boundaries. Other possible uses include multi-colored home driveways, tennis courts, sidewalks, swimming pools.

New TVA Process Uses Wet-Process Phosphoric to Make Diammonium Phosphate

TVA engineers are developing a new process to make granular diammonium phosphate fertilizer. It is reported that the method can use low-cost wet-process phosphoric acid without a purification step.

By taking advantage of chemical heat in the reaction of acid and ammonia, recycle rates and drying requirements are reduced below those of some competitive processes, according to TVA. Grade of product depends on purity of phosphoric acid available, and ranges up to 21-53-0. The process is being adapted to production of various grades, some containing potash.

TVA claims that its ammoniator is the key equipment in the process. Wet-process phosphoric acid, such as that made by U.S.I. at Tuscola, Illinois, is partially

MORE

New Type of Carbon Black Obtained from Burning Hydrocarbons in Chlorine

Researchers have obtained high yields of carbon blacks containing chemically bonded chlorine, by burning various hydrocarbons in the halogen gas rather than in oxygen. Such chlorocarbon blacks may have commercial use in rubber and plastics compounding, according to a recent report.

In the study, methane, propane, ethylene and natural gas were burned with submaximal amounts of chlorine to yield carbon black as a major product. By

MORE

CONTINUED

TVA Process

preneutralized in a tank. Then the ammoniation to diammonium phosphate is completed in the ammoniator-granulator drum. Excess ammonia must be fed to the drum to produce diammonium phosphate. Therefore, a scrubber is required to recover ammonia from exhaust gases. Phosphoric acid is fed to the scrubber to absorb ammonia, and the solution is fed to the preneutralizer. A recycle ratio of about 3:1 is required for control of granulation. Physical properties of the closely sized granular product are said to be excellent.

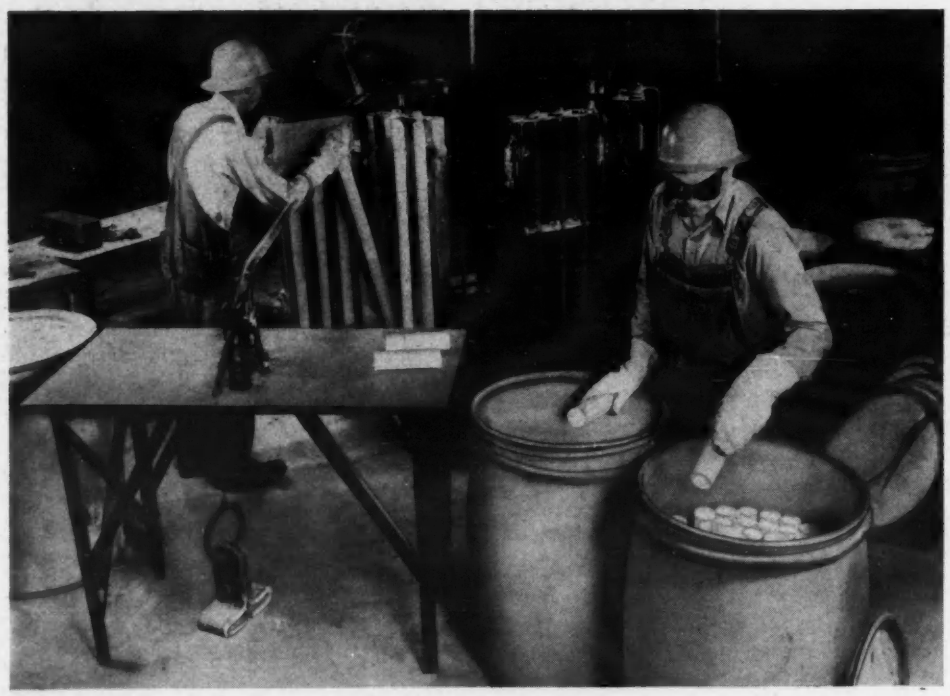
CONTINUED

Chlorocarbon Blacks

contrast, carbon black is only a by-product when these hydrocarbons are burned with oxygen. The quantity of carbon produced in the chlorine-hydrocarbon flames seems to be directly proportional to the chlorine-hydrocarbon ratio. It also seems to depend on the hydrocarbon used, and is greatest for methane.

These carbon blacks can contain as much as 45% chlorine. The halogen appears to be bonded to the carbon chemically, researchers report, since all attempts to remove it have left at least 10% chlorine.

No Oil for Sodium Bricks



Sodium packed under kerosene? Perhaps in the laboratory but not in industry, as you can see from this photo of the cutting and packing operations at U.S.I.'s metallic sodium plant in Ashtabula, Ohio. Every year, many tons of sodium are molded into bricks and packed *dry* in steel drums. An airtight seal is maintained during storage and shipment.

All phases of sodium handling are discussed in the latest edition of U.S.I.'s brochure "Handling Metallic Sodium on a Plant Scale". For your copy, address Technical Literature Department, U.S.I. Chemical News, 99 Park Avenue, New York 16, New York.

TECHNICAL DEVELOPMENTS

Information about manufacturers of these items may be obtained by writing U.S.I.

Chlorine safety data sheet is now being sold by MCA for nominal price. Covers properties, hazards and their engineering control, employee safety, emergency measures, container handling, waste disposal, medical management. **No. 1640**

New group of urethane elastomers now offered for use where abrasion resistance is essential. Claimed more rugged than manganese steel and other metals. Suggested for chute linings, pipeline crawler wheels, scrapers, etc. **No. 1641**

Temperature-indicating crayons and paints now on market are said to check temperatures of hot surfaces by completely changing color. Series of products cover range from 104°F. to 2,462°F. Claimed easy to apply and remove. **No. 1642**

Sodium peroxide is covered in new data sheet giving specifications, typical analysis, properties, shipping data and uses. Technical service is offered on handling and use in pulp and paper, textile and other fields. **No. 1643**

New laboratory oven is said to give highest temperature, combined with vacuum, now available. Can heat from room temperature to 500°F. in one hour, in 11-inch diameter by 12-inch deep vacuum chamber. **No. 1644**

Dry sulfamic acid product—with built-in pH color indicator, corrosion inhibitors, anti-foams, wetting agents—can now be obtained for removal of lime scale deposits from evaporative condensers and cooling tower systems. **No. 1645**

Polyethylene waste and drainage system described in new engineering and parts catalog now available. Said to be complete, permanent, corrosion-resistant. Includes sinks, traps, pipe and fittings, adapters, other equipment. **No. 1646**

Concise conversion tables and circular slide rule, now offered for chemical engineers, is shirt-pocket size. Includes slide rule, table of elements, temperature conversion chart, conversion factors, useful constants and data. **No. 1647**

m-Sulfobenzoic acid—new intermediate for dyes, colors, color developers and couplers, surfactants, textile treating agents, flavors, drugs, preservatives, dehydrating agents—is subject of data sheet recently released. **No. 1648**

Fallout is subject of new book which can now be purchased. Book covers bomb types, meteorological dispersion and persistence of fallout, effects of radiation, radiation sickness, biological effects, nuclear war, civil defense. **No. 1649**

PRODUCTS OF U.S.I.

Heavy Chemicals: Anhydrous Ammonia, Ammonium Nitrate, Nitric Acid, Nitrogen Fertilizer Solutions, Phosphatic Fertilizer Solution, Sulfuric Acid, Caustic Soda, Chlorine, Metallic Sodium, Sodium Peroxide.

Organic Solvents and Intermediates: Normal Butyl Alcohol, Amyl Alcohol, Fusel Oil, Ethyl Acetate, Normal Butyl Acetate, Diethyl Carbonate, DIATOL®, Diethyl Oxalate, Ethyl Ether, Acetone, Acetoacetanilide, Acetoacet-Ortho-Chloranilide, Acetoacet-Ortho-Toluidide, Ethyl Acetoacetate, Ethyl Benzoylacetate, Ethyl Chloroformate, Ethylene, Ethyl Sodium Oxalacetate, Sodium Ethylate, Urethan U.S.P. (Ethyl Carbamate), Riboflavin U.S.P.

Pharmaceutical Products: DL-Methonine, N-Acetyl-DL-Methonine, Urethan USP, Intermediates.

Ethyl Alcohol: Pure and all denatured formulas; Anhydrous and Regular Proprietary Denatured Alcohol Solvents SOLOX®, FILMEX®, ANSOL®M, ANSOL PR

PETROTHENE® . . . Polyethylene Resins

MICROTHENE . . .Finely Divided Polyethylene Resin.

Animal Feed Products: DL-Methionine, MOREA® Premix (to authorized mixer-distributors).

U.S.I. INDUSTRIAL CHEMICALS CO.
Division of National Distillers and Chemical Corporation
99 Park Avenue, New York 16, N. Y.

U.S.I. SALES OFFICES

Atlanta • Baltimore • Boston • Chicago • Cincinnati • Cleveland
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Potassium cyanide, dms., 20,000-lb. lots or more, works ... lb. .42½- —
dms., 2,000-19,999-lb. lots, works. lb. .43 - —
dms., smaller lots, works ..... lb. .44 - .44½
Potassium dichromate (see Potassium bichromate).
Potassium ferricyanide, dms., ton lots, works. lb. .50 - —
dms., smaller lots, works ..... lb. .65 - —
Potassium ferrocyanide, dms., ton lots. lb. .24½- —
dms., smaller lots ..... lb. .29 - —
Potassium fluoborate, fib. dms., c.l., works lb. .30 - —
fib. dms., l.c.l., works ..... lb. .31 - —
Potassium fluoride, dms., works lb. .37 - .38
Potassium gluconate, 100-lb. dm., f.o.b. works E lb. 1.67 - —
Potassium guaiacol sulfonate, NF, dms lb. 2.10 2.30
Potassium hydroxide, tech. (see Potash caustic).
Potassium hydroxide, USP, pellets, 100-lb dms., 1 to 100-dm. lots lb. .33½- .38
Potassium hypophosphite, NF, fib. dms., 1,000-lb. lots lb. 1.38 - —
Potassium iodide, USP, cryst., gran., or powd., 250-lb. dm., f.o.b. works lb. 1.40 - —
Potassium manure salt, min. 20% K_2O, bulk, c.l., works, unit-ton. .17 - .1765

Inside prices apply to material contracted for prior to July 1, 1959

Outside prices apply to material contracted for after that date but also for delivery during the current month.

Potassium metabisulfite, gran. dms., lb. .16 - —
Powd., dms ..... lb. .27 - —
Potassium muriate, standard, bulk, c.l., works unit-ton. .34 - .36
bagged 60% minimum K_2O, same basis ton.25.40 -26.60
Gran., bulk, c.l., works unit-ton. .35 - .37
bagged, 60% minimum K_2O, same basis. ton.26.00 -27.20
Potassium nitrate, NF, cryst., bbls., 20-ton lots. 100 lbs.17.00 - —
bbls., smaller lots ... 100 lbs.18.00 -19.00
gran., bgs., 20-ton lots 100 lbs. 9.50 —
bgs., smaller lots ... 100 lbs.11.00 -12.00
powd., bgs., 20-ton lots 100 lbs.10.50 - —
bgs., smaller lots ... 100 lbs.12.00 -13.00
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm., f.o.b. works E lb. .32 - —
Potassium pentaborate, gran., dms., c.l., works ton.219.50 - —
dms., ton lots, ex whse ... ton.311.00 - —
dms., smaller lots, ex whse ton.316.00 - —

Powdered potassium pentaborate $10 per ton higher.

Potassium perchlorate, dms., c.l., works lb. .18½- —
dms., l.c.l., works ..... lb. .19 - .20
Potassium permanganate, coml., kgs., works lb. .25 - .33
USP, dms., works ..... lb. .29 - .35
Potassium persulfate, dms., c.l., works lb. .17½- —
dms., l.c.l., works ..... lb. .18 - .21
Potassium pyrophosphate, tetrabasic, dms., works lb. .15½- .18½
Potassium prussiate red (see Potassium ferrocyanide).
Potassium prussiate yellow (see Potassium ferro-cyanide).
Potassium silicate, electrical grade, 30° Be, 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
dms., l.c.l., 5 dm. lots or more, works ..... 100 lbs. 7.25 - 7.65
tanks, works ..... 100 lbs. 6.15 - —
Potassium silicate, electrical grade, 40.5° Be, 1:2.1, dms., c.l., works 100 lbs. 5.95 - —
dms., l.c.l., 5 dm. lots or more, works 100 lbs. 6.70 - —
tanks, works ..... 100 lbs. 5.60 - —
Potassium silicate, glass grade, bgs., c.l., works 100 lbs.17.30 -18.00
bgs., l.c.l., works ..... 100 lbs.17.80 - —
Soln., 29° Be. 1:2.5, dms., c.l., works 100 lbs. 4.95 - —
dms., l.c.l., 5-dm. lots or more, works 100 lbs. 5.70 - —
tanks, works ..... 100 lbs. 4.60 - —
Potassium silicofluoride, bgs., works. lb. .09½- .10

Potassium silicofluoride in drums, 0.4c. per lb. higher.

Potassium stannate, dms., frt. alld. E lb. .789 - .861
Potassium sulfate, min. 50% K_2O, agricultural, bulk, c.l., works unit-ton. .67½- .69½

Inside price applies to tonnage contracted for prior to July 1, 1959.

Outside price applies to tonnage contracted for after that date but also for delivery during the current month.

Potassium sulfate, NF VII, cryst., dms., lb. .31 - .33
NF VII, gran., dms ..... lb. .18½- —
NF VII, powd., dms ..... lb. .16 - .17
Potassium sulfocyanate, NF, cryst., (see Potassium thiocyanate).
Potassium thiocyanate, NF, cryst., dms., works lb. .96 - .98
Tech., dms., works ..... lb. .77 - .79
Potassium titanate, ctns., c.l., works, lb. .16¼- —
ctns., 5-ton lots, works ..... lb. .16½- —
ctns., 1-ton lots or less, works lb. .16¾- —
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk, works, base price. ton.13.45 - —
bulk, works, July forward. ton.14.00 - —
Potassium-sodium tartrate, NF, gran. or powd., 250-lb. dms., c.l., works E lb..42½- —
250-lb. dms., 5,000-lb. lots, same basis lb. .43 - —
250-lb. dms., same basis lb. .43½- —
Potassium-titanium fluoride, fib. dms., works lb. .39 - .40
Potassium-zirconium flouride, fib. dms., c.l., works lb. .50 - —
fib. dms., l.c.l., works ..... lb. .52½- .55
Pregnenolone, bots. ..... gram. No prices.
Pregnenolone acetate, bots. gram. No prices.
Procaine hydrochloride, USP, antibiotic grade, dms., 2,000-lb. lots, frt. alld lb. 2.25 - —
USP, ampule grade, dms., 1,000-lb. lots, frt. alld lb. 2.40 - —
dms., 500 lbs ..... lb. 2.45 - —
dms., 100 lbs ..... lb. 2.50 - —
Progesterone, USP, bots ..... gram. No prices.
Pregnenolone acetate, bots .... gram. No prices.
Propenyl guaethol, dms. ..... lb.24.30 -27.00
b-Propriolactone, tech., dms., c.l., f.o.b. works lb. .47½- —
dms., l.c.l., l.t.l., same basis lb. .48½- —
tanks, same basis ..... lb. .45 - —
Propionic acid, syn., pure, dms., c.l., works lb. .23¼- —
dms., l.c.l., works ..... lb. .24¾- —
tanks, works ..... lb. .20¾- —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¾- —
dms., l.c.l., dlvd ..... lb. .16¼- —
tanks, dlvd. ..... lb. .12¼- —

n-Propyl alcohol, dms., c.l., dlvd. lb. .14 - .15
dms., l.c.l., dlvd ..... lb. .15½- .16½
tanks, dlvd. ..... lb. .11½- .12¼
n-Propyl gallate, dms., 100 to 2,000-lb. lots, works lb. 3.90 - 4.40
n-Propyl-p-hydroxbenzoate, USP, dms lb. 2.30 - 2.40
Propyl thiouracil, bots., 50 kilo lots or more kilo.55.00 - —
bots., smaller lots ..... kilo.55.10 -55.30
n-Propylamine, dms., c.l., dlvd lb. 1.24 - —
dms., l.c.l., same basis ..... lb. 1.255 - —
n-Propylene dichloride, consumers', dms., c.l., dlvd. E lb. .0845- —
dms., l.c.l., same basis ..... lb. .0995- —
tanks, same basis ..... lb. .07 - —

Propylene dichloride prices in West 1c. higher, same basis.

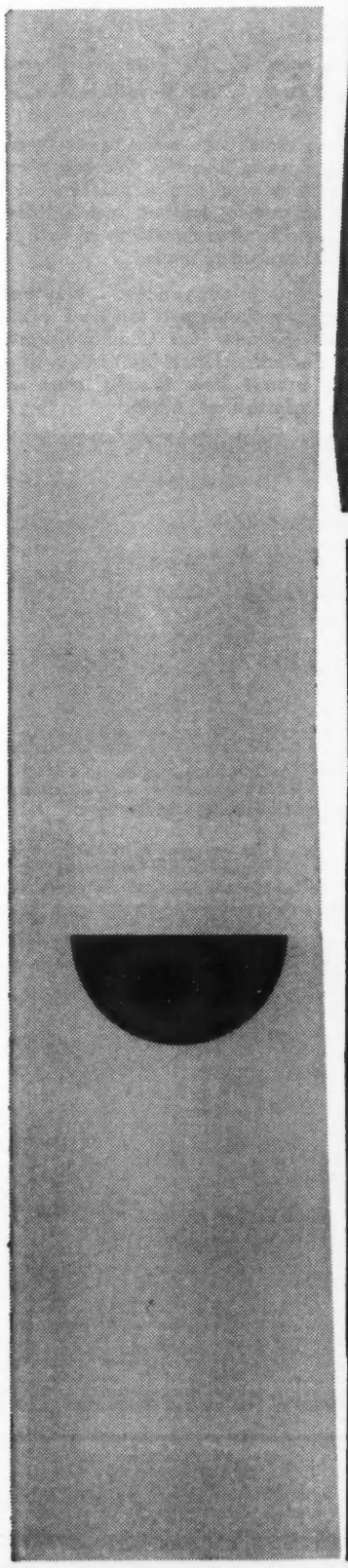
Propylene glycol, indust., dms., c.l., dlvd. E lb. .15 - —
dms., l.c.l., same basis ..... lb. .16¾- —
tanks, same basis ..... lb. .12½- —
USP, dms., c.l., dlvd. E ..... lb. .17 - —
dms., l.c.l., same basis ..... lb. .18¾- —
Propylene glycol methyl ether, dms., c.l., dlvd lb. .20 - —
dms., l.c.l., same basis ..... lb. .21 - —
tanks, same basis ..... lb. .18½- —
Propylene oxide dms., c.l., dlvd E. lb. .17 - —
dms., l.c.l., dlvd. E ..... lb. .18½- —
tanks, dlvd. E ..... lb. .14½- —
Psyllium seed, black, bgs ..... lb. .30 - .35
Blonde, bgs. ..... lb. .18 - .20
Husks, bgs. ..... lb. .42 - .45
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03⅝- .04¼
bgs., smaller lots ..... lb. .03⅞- —
Imp., Italian, silk-screen, coarse, bgs. ton lots lb. .06½- —
fine, bgs., ton lots ..... lb. .04 - —
sun dried, coarse, bgs. ton.60.00 - —
fine, bgs. ..... ton.60.00 -70.00
Pumpkin seed, bgs ..... lb. .25 - .28
Pyrethrins, syn. (see Allethrin).
Pyrethrum flowers, fine grd. 0.9% pyrethrins, bgs., ton, works lb. .50 - —
Powd., 1.3% pyrethrins, bgs., ton, works lb. .71 - —
Pyrethrum liquid, 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works, gal. 9.60 - 9.80
Pyrethrum liquid, 100/1 basis (10 grams pyrethrine per 100cc odorless base), dms., works gal.45.90 -46.90
Pyrethrum oleoresin, dewaxed, 20%, dms., works lb.11.00 -11.35
purif, 20%, dms., works .. lb.11.00 -11.35
Pyridine, denat., dms., c.l., works and frt. equald gal. 2.55 - —
dms., l.c.l., same basis ..... gal. 2.70 - —
Refd., 2°, non-ret. dms., c.l., same basis lb. .69½- —
dms., l.c.l., same basis ..... lb. .70 - —
tanks, same basis ..... lb. .65 - —
Pyridoxine hydrochloride, USP, 500-gram bots., dms., f.o.b. works kilo.95.00 -100.00
Pyrites, Canadian, 48-50% S, mines, long-ton. 5.00 - 6.00
Pyrocatechol (see Catechol).
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid, tech., bbls., 100-lbs., f.o.b., works lb. 3.50 - —
Pyrogallol, NF, 100-lb. dms. lb 3.50 - —
Pyroxylin, USP, bots ..... lb. 9.50 - —

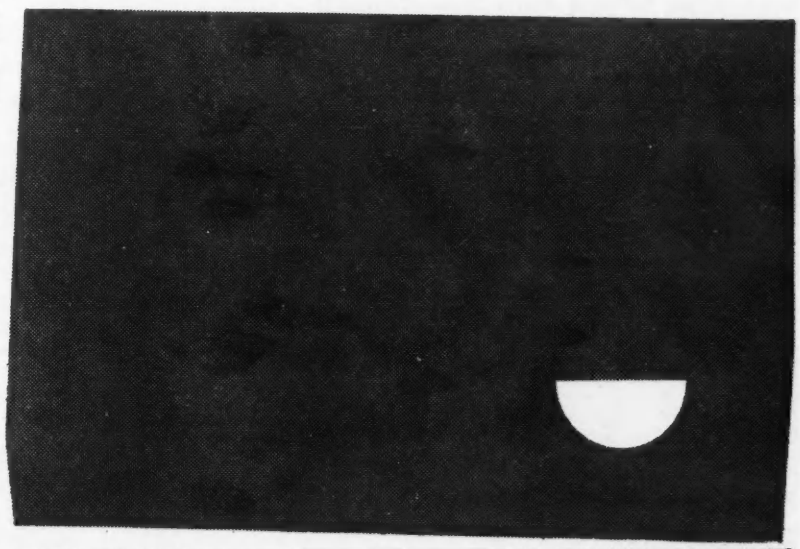
Q

Quassia chips ..... lb. .10 - —
Quicksilver (see Mercury metal).
Quince seed, bgs ..... lb. 1.30 1.40
Quinidine sulfate, USP, 1,000-oz. dm oz. .74½ —
Quinine, NF, 1,000-oz. dm .... oz. .3105- —
Quinine bisulfate USP, 1,000-oz dm. oz. .2330- —
Quinine hydrochloride, 1,000-oz dm. oz. .3030- —
Quinine sulfate USP, 1,000-oz dm. oz. .2575- —
Quinoline dms., c.l., frt. equald lb. .50¾- —
dms., l.c.l., same basis ..... lb. .51¼- —
tanks, same basis ..... lb. .50 - —

R

R salt paste, dms., frt alld., 100% basis lb .98 - —
Powd., frt. alld, 100% basis lb. 1.08 - —
Rapeseed oil, dms ..... lb. .15 - .15¼
tanks ..... lb. .13 - —
Rare earth oxalate, NF, 45-50%, bgs, works lb. 1.15 - —
Rauwolfia serpentina root, powd., bbls., dms. lb. 1.00 1.30





Looking toward tomorrow, visualizing the shapes and courses it will take, anticipating its needs... this search for ways to serve industry better and more fully has been an unremitting spur to Sonneborn, since many tomorrows ago. Inasmuch as this quest dates back to the turn of the century and has been concentrated upon a specialized segment of petroleum refining, it is not surprising that in products, technical assistance, service, Sonneborn Goes Further.

SONNEBORN
CHEMICAL AND REFINING
CORPORATION

White Oil Division, 300 Park Ave. South, New York 10, N.Y.

SPECIALISTS IN PETROLEUM SULFONATES (PETRONATES)
WHITE MINERAL OILS • PETROLATUMS

WO-10

We have changed our name from L. SONNEBORN SONS, INC. to SONNEBORN CHEMICAL AND REFINING CORPORATION

Red carmine, No. 40 (see Carmine).
Red oil (see Oleic acid).

RED PIGMENTS
Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

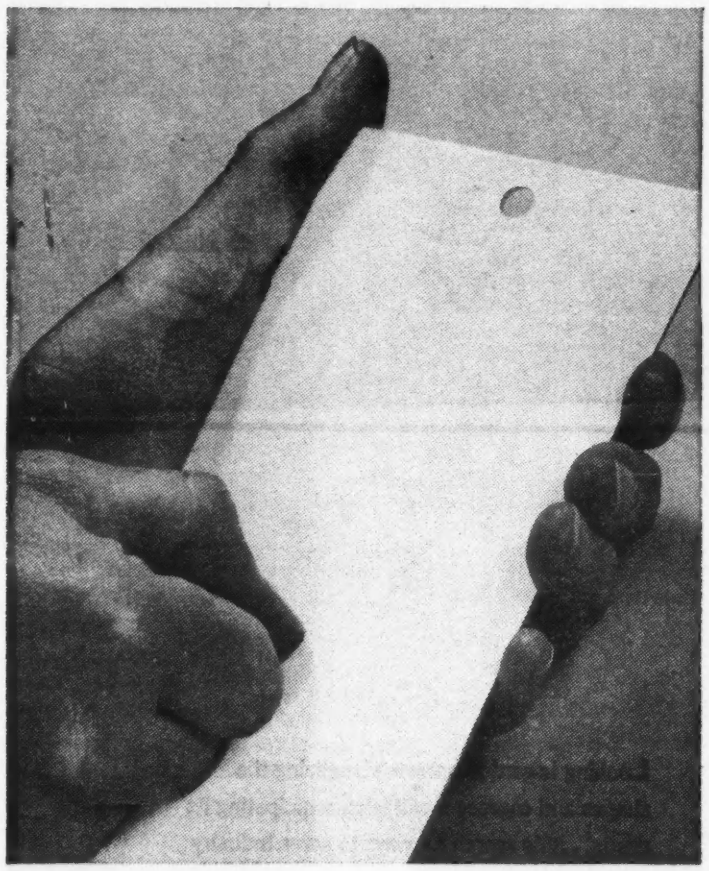
Red precipitate (see Mercuric oxide, red).
Red toner, Lake C, alizanine, bbls., works lb. 1.25 - —
Reserpine, cryst., bots gram. 1.25 - —
Resorcinol, tech grade, dms., c.l., works, frt. equald lb. .77¼- —
dms., l.c.l., same basis lb. .78½- —
USP, powd., dms., works lb. 2.95 - —
Resorcinol monoacetate, NF, dms. lb. 2.50 - —
Rhatany root, bgs lb. .14 - .16
Rhodamine red toner, molybdated, PMA, kgs., works lb. 6.00 - —
Tungstated, PTMA, works, kgs lb. 6.60 - —
Rhodinol, 5-lb. cans lb.42.00 -51.00
Synthetic lb.14.00 -16.00
Rhubarb root, India, whole, bgs lb. .25 - —
powd., bgs. lb. .35 - —
tanks, same basis lb. .14½- —
Riboflavin, USP fib. dms., kilo or more, dlvd kilo.36.00 - —
Riboflavin, 5-phosphate-sodium, fib. dms., kilo or more, dlvd. kilo.104.50 - —
Rice bran oil, clarified, dms., l.c.l. lb. .14 - .14½
tanks, dlvd. E lb. .12 Nom.
Ricinoleic acid (see Castor oil acids split).
Rochelle salt (see Potassium-sodium tartrate)
Roofing pitch (see Coaltar pitch roofing).
Rose oil, nat., Bulgarian, bots lb.1,152.00- —
Turkish, bots lb.560.00 750.00
Rosemary oil, Spanish, NF, cns., dms lb. .97 1.40
Spanish, tech., cns., dms lb. .50 1.20
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib. dms., works unit-lb. .10½- —
Resin, 25-45% fib dms., works, unit-lb. .10½- —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs., ton lots, same basis lb. .04¼- —
Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875- —
Houston, Texas gal. .155 - —
Rue oil, bots lb. 2.75 3.00
Rutin, NF, fib dms., 10 kilo lots kilo.13.00 - —
fib dms., 5 kilo lots kilo.13.50 - —
fib dms., 1 kilo kilo.14.00 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis lb. .24 - —

S

S acid, bbls., works lb. 3.25 - —
Sabadilla seed, activated, ground with lime, bbls. lb. .42 - .44
Saccharin, calcium, fib. dms., 1,000-lb lots, works lb. 2.80 - —
USP, gran., soluble, dms., 1,000-lb. lots lb 1.40 - —
dms., smaller lots lb. 1.50 - —
USP, powd., soluble, insoluble, dms., 1,000-lb lots lb. 1.45 - —
dms., smaller lots lb. 1.55 - —
Saccharin, USP, powd., insoluble, dms., 1,000-lb lots lb 1.43 - —
dms., smaller lots lb. 1.53 - —
Safflower oil, dms., New York lb. .1725- .1750
tanks, Atl. Coast lb. .1525- —
Saffron, Mancha Superior, tins lb.20.50 — —
Safrol, dms. lb. .65 - —
Sage, Dalmatian, bgs lb. .40 - —
Greek, cns. lb .15 - —
Italian, cns. lb .18 — —
Sage oil, clary, bots lb.15.50 -18.00
Dalmatian, cns lb 2.85 3.25
Spanish, cns lb. 1.25 1.75
Sal soda (see Soda sal).
Salicylaldehyde, dms., c.l., t.l., f.o.b., plant, frt. equald lb 1.23 - —
dms., l.c.l. same basis lb 1.25 - —
Salicylamide, 100-lb dms lb 1.05 - —
Salicylic acid, tech., fib. dms., c.l., t.l., dlvd lb. .40½- —
fib dms. l.c.l. dlvd lb. .44¾- —
Salicylic acid, USP, cryst., 200-lb. fib. dms., 1,000 lbs or more lb. .51¾- —
200-lb fib dms., less than 1,000 lbs lb. .54¾- —
100-lb fib dms, 1,000 lbs or more lb. .53¾- —
100-lb. fib. dms. less than 1,000 lbs lb. .56¾- —
USP, powd., 100-lb fib dms., 1,000 lbs. or more lb. .58¾- —
100-lb fib dms., less than 1,000 lbs lb. .61¾- —
Salol, NF, gran., bbls., kgs. lb. 1.30 - —
Powdered salol, 25c per lb. higher.
Salt, rock, paper bgs., c.l. 100 lbs 1.09 - —
Salt, table vacuum, common, fine, paper bgs., c.l 100 lbs. 1.34 - —
Saltcake, dom. bulk, works, 100% Na_2SO_4 basis ton.28.00 - —
Saltpeter (see Potassium nitrate)
Sandalwood E Indian, chips, bgs., lb .55 .66
powd, fib dms lb 75 76
Sandalwood oil, cns lb.23.50 - —
Sarcosine tech, tanks, f.o.b., works, frt. equald lb 1.03 — —
lb No stocks.
Sardine oil, crude, tanks, Pac coast
Sassafras oil, artif., dms lb. .45 - —
Nat., dom., dms lb 1.40 - —
Savory oil, cns lb. 4.75 - —
Schaeffer's salt paste, dms., frt. alld 100% basis lb. .85 - —
Powd. bgs. frt alld, 100% basis. lb. .95 - —
Scopolamine hydrobromide, USP, bots oz.13.00 - —
Sebacic acid, CP bgs. c.l. works. lb .69½ —
bgs., l.c.l., works lb 71½ —
Purified, bgs. c.l., works lb .65½ —
bgs., l.c.l., works lb .67½ —
Seidlitz mixture fib dms. 5,000-lb. lots lb .30½ —
fib dms. smaller lots lb .31 .32
Selenium powd. 99½% dms. dlvd lb 7.00 —
Senega root bls lb 3.00 —
Senna leaves, Alexandria, whole and half, bls lb .20 .22
siftings lb .16 —
Tinnevelly No. 1, bls lb .22 —
No 2, bls lb .18 —
No 3, bls lb .14 —
pods, bls lb .28 —
powd bbls. bxs lb 17 —
Serpentaria root, bls lb 6.50 —
Sesame oil USP, dms lb .38 .39
Sesame seed Colombian, bgs lb. 15½ —
Lebanese, hulled, bgs lb. .19 —
Nicaraguan, hulled, bgs lb. .24 —
nat., bgs lb. .14 —
Salvadorian, Nat. bgs lb. .16 —
Shellac, bleached bonedry, bgs., 1,500-lb lots lb. .46 —
dms., l.c.l., works lb. .22 .30½
bbls., 1,500-lb. lots lb. .47 —
kgs., 1,500-lb lots lb .48 —
Bonedry shellacs prices for less than 1,500-lb lots 1c. per lb. higher for all packages.
Shellac, bleached, refd. bgs., 1,500 lb. lots lb. .56 —
bbls., 1,500-lb lots lb. .57 - —
kgs., 1,500-lb. lots lb. .58 - —
Shellac, orange lemon No. 1, bgs., 10-bg. lots lb. .37 .39
lemon No. 2, bgs., 10-bg. lots. lb. .34 .37
superfine, bgs., 10-bg. lots lb. .32 .34
Shellac in 1 to 10-bg. lots 1c per lb. more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 - —
dms., l.c.l., works gal. .48 - —
tanks, works gal. .25 — —
Sienna pigment, burnt, paper bgs., c.l., works lb. .06½- .18½
paper bgs., l.c.l., works lb. .06¾- .17¾
Raw, paper bgs., c.l., works lb. .06¾- .16¾
paper bgs., l.c.l., works lb. .07 .17
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton.25.00 —
bgs. l.c.l. works, ex whse. ton.45.00 55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton.20.00 - —
bgs., l.c.l., works ton.25.00 - —
99½%, 140 mesh, bgs., c.l., works ton.15.00 - —
bgs., l.c.l., works ton.20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .18 - —
tanks, works lb. .17 - —
Silver bullion, ingots, cs Troy oz. .91⅜- —
Silver cyanide, bots., 1,000-oz. lots, oz. .94¾- —
bots., 500-oz. lots oz. .95¼- —
bots., 100-oz. lots oz. .96¼- —
Silver nitrate, CP, cryst., bots., 1,000 to 4,000 oz., f.o.b. works oz. .67¼- —
bots., 250-500 oz., same basis. oz. 67¾- —
USP granular silver nitrate 4c. per oz. higher.
Silver proteinate, mild, USP, 16-oz. bots oz. 1.46 - —
Snakeroot oil, Canada, cns lb.40.00 -43.00
Soapbark, crushed, bls lb. .30 .35
Powd., bls. lb. .35 .40
Whole, bls. lb. .20 .25
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 —
paper bgs., l.c.l., stock pts., 100 lbs. 3.00 4.77
bulk, c.l., works 100 lbs. 1.60 - —
Light, 58%, paper bgs., c.l., works 100 lbs. 1.85 —
paper bgs., l.c.l., stock pts. 100 lbs. 3.95 - 4.72
bulk, c.l., works 100 lbs. 1.55 - —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs. 5.20 - —
liq., 50%, sellers' tanks, works, dry basis 100 lbs. 2.90 - —
50%, rayon type, sellers' tanks, works, dry basis 100 lbs. 2.90 3.00
Soda, caustic, liq. 73%, sellers' tanks, works, dry basis. 100 lbs. 3.00 —
liq., 73%, rayon type, sellers' tanks, works, dry basis lb. 3.00 - 3.10
solid, 76%, dms., c.l., works, 100 lbs. 4.80 - —
Soda, sal, conc., bgs., c.l., works. 100 lbs. 2.50 - —
bgs., smaller lots, works 100 lbs. 2.80 - —
Sodium acetate, anhyd., bgs., c.l., dlvd. E lb. .14½- —
NF, 60%, gran., dms., c.l., works, lb. .15½- —
dms., l.c.l., works lb. .17½- —
Sodium alginate, NF, white powd., dom., 300 lbs. or more lb. 1.02 - —
Sodium p-aminosalicylate, dms., 100-lb. lots or more, frt. adjusted lb. 1.90 - —
Sodium antimoniate, bgs., c.l., dlvd. E lb. .27½- —
bgs., l.c.l., dlvd. E lb. .29 - —
Sodium arsenate, 60% arsenic pentoxide, 200 lb. dm., less than ton lots, f.o.b. works lb. .24 - —
ton lots or more, same basis. lb. .23½- —
Sodium arsenite, 94% soluble pink powder, 75% arsenious oxide, dealers, 100-lb. dms., ton lots or more, f.o.b., works lb. .18½- —
1,600-1,900 dms., same basis lb. .19 - —
100-500 dms., same basis lb. .20 - —
Sodium ascorbate, dms., 25-50 kilo dms., f.o.b. works kilo.10.00 - —
10-kilo dm., same basis kilo.10.35 - —
5-kilo dm., same basis kilo.10.75 - —
1-kilo bot., same basis kilo.11.00 - —
Sodium benzoate, tech., dms., c.l., t.l., frt. alld lb. .35 - —
dms., l.c.l., same basis lb. .39 - —
USP, dms., c.l., t.l., frt. alld lb. .38 - —
dms., ton lots, same basis lb. .43 - —
dms., 1,000-lb. lots, same basis. lb. .45 - —

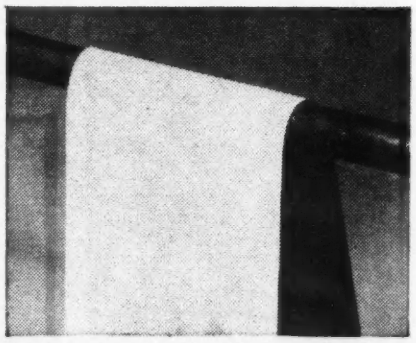
SILICONE NEWS from Dow Corning

Paint Tougher Than Nails



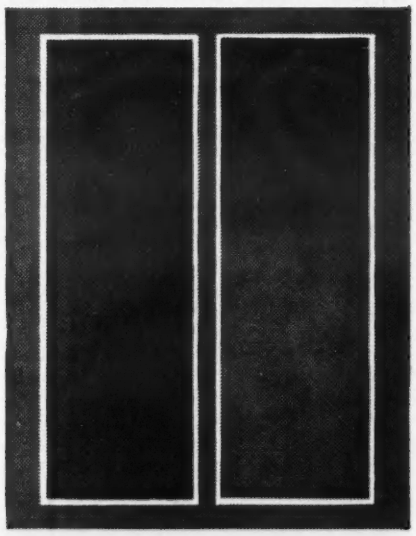
Another plus: as with many paints based on Dow Corning Silicones, this new resin can be formulated into a full range of colors. In product finishes, such silicone paints provide more durability as well as heat resistance where needed.

The "proof is in the painting". Why not try your own thumb nail test on a paint based on this new Dow Corning silicone resin? For full technical information contact the nearest Dow Corning office or write directly to Dept. 6310a.



Paint based on new Dow Corning resin takes a 180° bend on a ¼" mandrel without crazing, checking, or peeling.

Panels exposed for one year in industrial location. Note how organic paint (right) has faded and chalked while silicone finish is unaffected.



New Silicone Paint Bakes At 350 F; Has Exceptional Weather Resistance

One of the newest Dow Corning resins formulates into a coating that's a real "toughie". It outlasts every good organic we test it against in Florida, retaining full color and gloss. In high temperature aging tests, paints based on this new resin withstand continuous 450 F without discoloring. In addition, this toughest of all silicone paint resin compares well with conventional resins for flexibility and adhesion.

Processing is simplified, too, with this new resin. Good film properties are obtained by curing the coating in temperatures ranging from 350 to 600 F, by adjusting exposure time.

Weathering — punishing snow, rain, sun, salt spray — has no harmful effects, either. Paints based on this new resin outlast 'em, sealing destruction away. Aluminum siding, hardware and some outside appliances are a few applications where such a paint would be advantageous.

For more detailed information or specific technical data on silicones for paint formulation, write us today.

first in silicones

Dow Corning CORPORATION
MIDLAND, MICHIGAN

ATLANTA BOSTON CHICAGO CLEVELAND DALLAS LOS ANGELES NEW YORK WASHINGTON, D. C.

Sodium bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.95 - —
bgs., l.c.l., works 100 lbs. 3.85 - —
USP, powd., bgs., c.l., works, 100 lbs. 2.55 - —
bgs., l.c.l., works 100 lbs. 3.45 - —
Sodium bichromate, gran., ogs., c.l., t.l., works lb. .13 - —
bgs., l.c.l., works lb. .13½- .14¼

Sodium bichromate in dms. ¾c. per lb. higher.

Sodium bifluoride, bbls., c.l., works, frt. equald lb. .19½- —
bbls., l.c.l., same basis lb. .2025- —
Sodium bisulfate, bulk, c.l., works, 100 lbs. 2.00 — —
dms., c.l., frt. equald 100 lbs. 3.00 3.60
dms., l.c.l., frt equald 100 lbs. 3.50 4.10
Sodium bisulfite anhyd., bgs., c.l., works 100 lbs. 5.00 - —
bgs., l.c.l., works 100 lbs. 5.45 - —
Soln., 35° bbls., c.l., works 100 lbs. 1.70 - —
bbls., l.c.l., works 100 lbs. 2.20 - —
Sodium borate (see Borax).
Sodium borohydride, powd., dms., c.l., works lb. 19.90 - —
dms., l.c.l., works lb. 33.00 - 40.00
Sodium borohydride, stabilized water soln., 12% NaBH, 100% basis, dms., works lb. 15.00 - —

Pelletized sodium borohydride $1 per lb. higher in 1,000-lb lots.

Sodium bromide, USP, gran., dms., works lb. .40 - —
Sodium carbonate, cryst., monohydrated (see Soda, sal).
Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs. 3.10 - —
bgs., l.c.l., works 100 lbs. 3.50 - —
Sodium carboxymethyl cellulose (see CMC).
Sodium chlorate, cryst., 350-lb. dms., c.l., works lb. .09 - —
dms., l.c.l., works lb. .09½- .10½
Sodium chlorate in 100-lb. dms., only, ¼c. per lb. higher.
Sodium chloride, tech. (see Salt).
Sodium chloride, USP, gran., bgs. lb. .05 - —
Sodium chlorite, tech., dms., c.l., works lb. .58 - —
dms., 20-dm. lots or more, works lb. .66 - —
dms., smaller lots, works lb. .70 - .73
Sodium chloroacetate, tech., dms., c.l., works lb. .27 - —
dms., l.c.l., works lb. .28 - —
Sodium chromate, anhyd., fib. dms., c.l., t.l., works lb. .14¾- —
fib. dms., l.c.l., works lb. .15¼- .16½
Sodium chromate tetrahydrate, bgs., c.l., t.l., works lb. .1015- —
bgs., l.c.l. lb. .1065- .1190
Sodium citrate, anhyd., 200-lb. dm., f.o.b. works E lb. .62 - —
NF VIII, gran., bgs., c.l., same basis lb. .26 - —
USP XIV, gran., bgs., c.l., same basis lb. .29 - —

Sodium citrate, USP, powd. prices ½c. higher.

Sodium cyanate, dms., 1,000-lb. lots, works lb. .85 - —
dms., smaller lots, works lb. .90 - 1.10
Sodium cyanide, briquettes or gran., 97 percent min., dms., works, 20,000-lb. lots lb. .176 - —
dms., same basis, 5,000 to 19,999-lb. lots lb. .188 - —
dms., same basis, 1,000 to 4,900-lb. lots lb. .198 - —
Sodium cyclamate, 100-lb. dm., f.o.b. works lb. 1.95 - —
Sodium diacetate, anhyd., 39-41% acetic acid, dms., c.l., works lb. .18 - —
250-lb. dms., l.c.l., works lb. 18¾- —
Tech., 33-35% acetic acid, dms., l.c.l., works lb. .15 - —
250-lb. dms., l.c.l., works lb. .15¾- —
Sodium dimethyl dithiocarbamate, 40% soln., dms., c.l., t.l., frt. alld., 100% basis lb. .42 - —
dms., l.c.l., t.t.l., same basis lb. .47 - .52
tanks, same basis lb. .38 - —
Sodium ferrocyanide, bgs., 10-ton lots lb. .13½- —
bgs. smaller lots lb. .14¾- —
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald lb. .1390- —
fib. dms., l.c.l., works, frt. equald lb. .1465- —
Sodium formate, bgs., c.l., works, 100 lbs. 7.05 - —
bgs., l.c.l., ex whse 100 lbs. 8.65 - —
Sodium gentisate, 100-lb. fib. dms. lb. 5.50 - —
Sodium gluconate, refd., 250-lb. dm., f.o.b. works E lb. .64 - —
Tech., bgs., c.l., t.l., same basis lb. .34 - —
Sodium hydride, 50% soln. in oil, dms., works lb. 1.25 - 2.50
25% soln. in oil, dms., 50 lbs. or less, f.o.b. shipping point, lb. 2.20 - —
dms., 50-99 lbs., same basis lb. 1.77 - —
dms., 100-999 lbs., same basis lb. 1.20 - —
dms., 1,000 lbs or more, same basis lb .95 —
Sodium hydrosulfide (see Sodium sulfhydrate).
Sodium hydrosulfite, dms., c.l., frt. alld lb. .23½- —
dms., l.c.l., frt. alld. lb. .25¾- —
Sodium hydroxide, NF, pellets, 100-lb. dms., 1 to 100-dm. lots, lb .23½- .26
Sodium hydroxide, tech. (see Soda, caustic).
Sodium hypophosphite, NF, dms. 1,000-lb. lots lb. .99 - —
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide, USP, 300-lb. dms., f.o.b. works lb. 1.98 - —
Sodium lauryl sulfate, dms., c.l., dlvd lb. .20½- —
dms., l.t.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .19½- —
Sodium lignin sulfonate, bgs., c.l., works 100 lbs. 4.25 - 6.50
l.c.l., bgs., works 100 lbs. 4.40 - 7.00
Sodium metabisulfite (see Sodium bisulfite).
Sodium metaborate octahydrate, gran., bgs., c.l., works ton 210.00 - —
bgs., ton lots, ex whse 100 lbs. 8.00 - —
bgs., smaller lots, ex whse. 100 lbs. 9.25 -11.25
Tetrahydrate, bgs., c.l., works, ton 210.00 - —
bgs., ton lots, ex whse 100 lbs. 13.93 - —
bgs., smaller lots, ex whse. 100 lbs. 15.18 -17.18
Sodium, metallic, bricks, c.l., works, lb. .21 - —
Fused, 18,000-lb. lots or more, works lb. .19¼- —
tanks, works lb. .17 - —
Sodium metaliinate, bbls., frt. alld, lb. .62 - —
Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt 100 lbs. 11.10 - —
bgs., l.c.l., same basis 100 lbs. 11.85 - —
dms., c.l., same basis 100 lbs. 11.70 - —
dms., l.c.l., same basis 100 lbs. 12.45 - —
Sodium metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.70 - —
bgs., 6,000-19,900 lb. lots, works, 100 lbs. 6.05 - —
dms., c.l., works 100 lbs. 6.20 - —
dms., l.c.l., works 100 lbs. 6.55 - —
Sodium metasilicate pentahydrate, bgs., c.l., works 100 lbs. 4.45 - —
bgs., l.c.l., works 100 lbs. 4.80 - 6.75
dms., l.c.l., works 100 lbs. 4.95 - —
dms., l.c.l., works 100 lbs. 5.30 - 7.25

Sodium molybdate, anhyd., dms., works, frt. equald lb. .92 - .99
Cryst., dms., works, frt. alld lb. .74 - .76
Sodium monoglutamate (see Monosodium glutamate).
Sodium monohydrate (see Sodium carbonate, monohydrated).
Sodium naphthionate, bbls. lb. .73 - —
Sodium nitrate, dom., crude, bgs., c.l., works ton 48.00 - —
bulk, c.l., works ton 44.00 - —
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac., whse ton 48.00 - —
bulk, c.l., same basis ton 44.00 - —
Sodium nitrite, USP, bbls., c.l., works, frt. equald 100 lbs 9.00 - —
bbls., l.c.l., same basis 100 lbs. 11.00 - —
Sodium orthosilicate, conc., dms., c.l., works 100 lbs. 6.70 - —
dms., l.c.l., works 100 lbs. 7.05 - 7.65
Hydrated, flake, bbls., c.l., works, 100 lbs 5.65 - —
bbls., l.c.l., works 100 lbs. 7.60 - 7.90
Sodium oxalate, 88%, bgs., works 100 lbs. 12.35 - —
99%, bgs., works 100 lbs. 15.40 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate).
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, briquets, dms., c.l., works, frt. equald lb. .26 - —
dms., l.c.l., same basis lb. .27½- .34
Pellets, dms., c.l., same basis lb. .26 - —
dms., c.l. same basis lb. .27½- .34
Powd., dms., c.l., same basis lb. .25 - —
dms., l.c.l., same basis lb. .26½- .33
Sodium pentabarbital, USP, dms., 100 lbs. or more lb. 6.00 - —
Sodium perborate, NF, tech., bgs., c.l., works lb. .18½- —
bgs., l.c.l., works lb. .19 - .21
Sodium peroxide, dms., c.l., t.l., dlvd E. of Miss lb. .21½- —
dms., l.c.l., same basis lb. .22 - .22½
Sodium phenobarbital, USP, 100-lb. dms lb. 3.75 - —
Sodium phenosulfonate, USP, IX, gran., dms lb. .52 - .53
NF, powd., dms. lb. .55 - .56
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt equald 100 lbs. 7.95 - —
bgs., l.c.l., same basis 100 lbs. 8.35 - 9.40
Dibasic, cryst., bgs., c.l., t.l., frt. equald 100 lbs. 4.60 - —
bgs., l.c.l., frt. equald 100 lbs. 5.00 - 5.75
Dibasic, duohydrate, bgs., c.l., frt. equald 100 lbs. 7.60 - —
bgs., l.c.l., same basis 100 lbs. 8.10 - —
Sodium phosphate, USP, dried, powd., bgs., dms., works lb. .19 - .20½
Monobasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.00 - —
bgs., l.c.l., same basis 100 lbs. 9.40 -10.00
Tribasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.00 - —
bgs., l.c.l., frt. equald 100 lbs. 9.45 -10.05

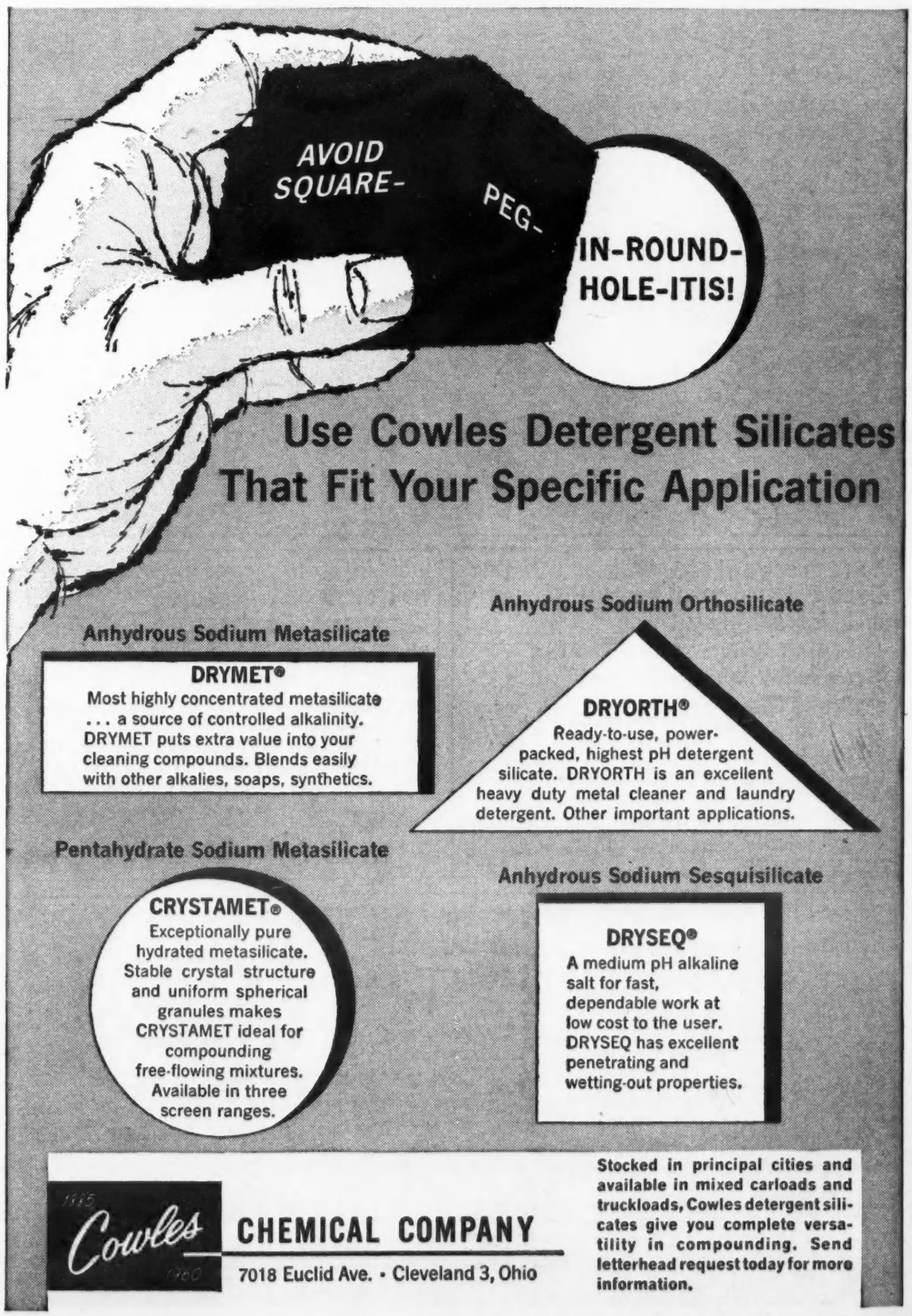
Sodium phosphate in dms. 60c. to 80c. higher than bgs.

Sodium picramate, tech., paste, dms., f.o.b. works, frt. equald lb. .90 - —
Sodium propionate, any quantity, dms., dlvd. E. of Rockies, lb. .34½- —

Prices W. of Rockies 3c. per lb. more.

Sodium prussiate, yellow (see Sodium ferrocyanide)
Sodium pyrophosphate acid, bgs., c.l., works, frt. equald, 100 lbs. 11.10 - —
bgs., l.c.l., same basis 100 lbs. 11.65 12.35
Sodium pyrophosphate, ferric, dms., c.l., t.l., works lb. .36 - —
dms. l.c.l. works lb. .37 - .39
Tetrabasic, anhyd., bgs., c.l., works frt equald 100 lbs. 7.81 - —
bgs., l.c.l same basis 100 lbs. 9.21 9.71
Sodium salicylate USP dms., 1,000-lbs. or more lb. .78½ - —
dms. less than 1,000 lbs., dms. lb. .81½- —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs. 2.35 - —
Sodium sesquicarbonate, bgs., l.c.l., dlvd. zone 1 100 lbs. 4.10 4.35
dlvd zone 2 100 lbs 4.35 4.60
dlvd. zone 3 100 lbs 4.75 4.90
dlvd zone 4 100 lbs 5.35 5.60

Sales zones are (1) Atl. states E. of Miss., R and N of south bound of Ky. and Va. Ala., La., and Miss. south of 31°; Tex E. of 100°; S of 31° Fla.; also Me., N. H. and Vt in which there are special county zones: Davenport, Ia., and St Louis; (2) Ark E. of 98° Ga.; Iowa (except Davenport) Minn., Mo. (except St Louis) Neb. E. of 98° N. C., S C., Tenn and Tex N of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No of 31°; (3) Ark W of 96°, Kan., Neb W. of 98° N D., Okla., S. D., Tex., W of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.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Stocked in principal cities and available in mixed carloads and truckloads, Cowles detergent silicates give you complete versatility in compounding. Send letterhead request today for more information.

Sodium Sesquisilicate—Sucrose Octa-Acetate

Sodium sesquisilicate, anhyd., bgs., c.l., t.l. works 100 lbs 5.70 - —
dms. c.l., t.l. works 100 lbs 6.20 - —
Sodium sesquisilicate hydrated, bgs., c.l., works 100 lbs 5.00 - —
bgs., 6,000-19,900 lb. lots, works 100 lbs 5.35 - —
dms., c.l., works 100 lbs 5.50 - —
dms. 6,000-19,900 lb lots works. 100 lbs 5.85 - —
Sodium silicate, liq., 40° Be., 1:3.2, turbid dms., c.l., works. 100 lbs 1.65 - —
dms., l.c.l., works 100 lbs 1.90 2.40
tanks works 100 lbs 1.20 —
47° Be. 1:2.9. turbid, dms., c.l., works 100 lbs 2.25 —
dms., l.c.l., works 100 lbs 2.60 3.45
tanks, works 100 lbs 1.90 —
52° Be. 1:2.4. turbid, dms., c.l., works 100 lbs 2.65 —
dms., l.c.l., works 100 lbs 3.00 3.50
tanks, works 100 lbs 2.30 - —
Solid, 1:3.2, bgs., works ton.67.50 - —
Sodium silicofluoride, bgs., c.l., works lb. .065 - —
bgs., l.c.l., works lb. .725- —
Sodium silicofluoride in dms., 0.4c. per lb. higher
Sodium stannate, dms., works, frt. alld. E lb. .648 - .707
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls., works lb. .22 - —

Sodium sulfate, NF VII, dried, powd., dms lb. .22½- —
Tech., anhyd. bgs. c.l. dlvd E. ton.54.00 - —
Tech., detergent, rayon grade, bgs. c.l., works ton.36.00 - —
bulk, c.l., works ton.32.00 - —
USP, cryst., fib dms lb .17½- .18
Sodium sulfhydrate, flake, 70-72%, dms. c.l. works, frt. equald lb. 07¼- —
dms., l.c.l., same basis lb. 08¼- —
Liq. 40-44%. tanks, works, 100% basis ton.130.00 - —
Sodium sulfide flake, dms., c.l., works, E., frt equald lb 06 - —
dms. l.c.l., same basis lb .07 - —
Fused, bbls., c.l., works, E., frt. equald lb. 05½- —
bbls., l.c.l., same basis lb 06½- —
Sodium sulfite anhyd., powd., bgs., c.l., works 100 lbs 7.55 - —
bgs., l.c.l. same basis 100 lbs 7.95 - —
Anhyd., tech., bgs., c.l., works. 100 lbs 3.50 —
bgs., t.l., same basis 100 lbs 4.00 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax).
Sodium tetrasulfide, liq., 40%, dms., c.l., works frt equald lb .04½- —
dms., l.c.l same basis lb. .05½- —
Sodium thiocyanate, CP, dms lb. .55 .65
Tech., anhyd., dms., 1 ton lots or more, works lb. .317 - —
dms., less than ton lots, works lb. .337 - —

Sodium thiosulfate, NF, cryst., bbls. lb. .13½- —
Tech., anhyd. 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 7.75 - —
100-lb. bgs., l.c.l., l.t.l., frt. equald 100 lbs. 8.15 - —
Sodium thiosulfate, tech., anhyd., photo grade, 64-lb. bgs., c.l., t.l., frt. equald lb. .0775- —
64-lb. bgs. l.c.l. l.t.l., frt. equald lb. .0815- —
Tech., pentahydrate, photo grade, 100-lb bgs., c.l., t.l., frt. equald 100 lbs. 4.95 - —
Sodium thiosulfate tech., pentahydrate, photo grade, 100-lb. bgs., l.c.l., l.t.l., frt. equald 100 lbs. 5.20 - —
Sodium titanate, ctns., c.l., works. lb. 14¼- —
ctns., 5-ton lots, works lb. .14½- —
ctns., 1-ton lots or less, works lb .14¾- —
Sodium trichloroacetate, 90%, 100-lb dms., c.l., frt alld. E. lb. .35 - —
50-lb dms., c.l., frt. alld. E lb. .35½- —
10-lb cns., c.l., frt alld E lb. .42 - —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.
Sodium tripolyphosphate, bgs., c.l., works frt equald 100 lbs 8.16 - —
bgs., l.c.l., same basis 100 lbs 8.56 - 9.06
Sodium trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs 8.95 —
bgs., l.c.l., works 100 lbs 9.70 -13.13
dms., c.l., works 100 lbs 9.45 —
dms., l.c.l., works 100 lbs. 10.20 -10.60
Sodium tungstate, tech., kgs., dlvd. E lb. 1.32 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).

Sodium-cinchophen (see Cinchophen-sodium).
Sodium formaldehyde sulfoxylate, dms., c.l., dlvd. lb. .21 - —
dms., l.c.l., same basis lb. .21½- —
Sodium-zirconyl sulfate, fib. dms., 1,000-lb. lots or more works lb. .28 - —
fib. dms., smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt. equald gal. .30 - .35½
Solvent naphtha, petroleum, straight aromatic, 310°-360°F. b.r., 14°-16°C. m.a.p., tankcars, New Jersey and New York gal. .29 - —
Houston, Texas gal. .29 - —
355°-420°F. b.r., 17°-18°C. m.a.p., tankcars, New Jersey and New York. gal. .30 - —
Houston, Texas gal. .30 - —
Solvent naphtha, petroleum, partial aromatic, 211°-265°F. b.r., 31°C. m.a.p., tankcars, New Jersey and New York gal. .235 - —
286°-340°F. b.r., 22°C m.a.p., tankcars, New Jersey and New York gal. .275 - —
319°-380°F b.r., 27°C. m.a.p., tankcars, New Jersey and New York gal. .27 - —
322°-395°F b.r., 28°C m.a.p., tankcars, New Jersey and New York gal. .28 - —
Sorbitan monostearate fib dms., 20,000-lb lots, works lb. .33½- —
fib dms., 10,000 to 20,000-lb. lots, works lb. .35½- —
fib. dms., smaller lots, works lb. .38½- .40½
Sorbitan tristearate, fib dms., 20,000-lb. lots, works lb. .34 —
fib dms., 10,000 to 20,000-lb lots, works lb. .36 - —
fib. dms., smaller lots, works lb. .39 - .41
Sorbitol, NF, reg., 70% aqueous, dms., c.l., works lb. .18 - —
dms., l.c.l., works lb. .19 - —
tanks, works lb. .16¼- —
cryst., resin grade, pellets, dms., c.l., works lb. .23 —
dms., 1 to 5-ton lots, works. lb .25 .26
powd., dms., c.l., works lb. .38½- —
dms., 10,000 to 20,000 lb. lots, works lb. .40½- —
Sorbitol, soln., comyl., aqueous, dms., c.l., works lb. .26 - —
dms., l.c.l., works lb. .27 - —
Soya protein, chemically isolated, old process, bgs., c.l., works. lb. .23 - —
bgs., l.c.l., works lb. .23¼- .23½
Chemically isolated, new process, bgs., c.l., works lb. .20 - —
bgs., l.c.l., works lb. .20¼- .29½
Soybean meal, 44%, bulk, unrestricted, Decatur ton.49.50 - —
Soybean oil, crude, tanks, Decatur lb. .09¼- —
Foots, soapstock, acid 95%, tanks. lb. .04⅞- —
Refd., alkali, dms. lb. .1356- .1375
tanks lb. .1156- —
Clarified, dms. lb. .1306- .1335
tanks lb. .1106- —
Salad, dms. lb. .13¼- .13½
tanks lb. .11¼- —
Soybean oil acids, dbl. dist., dms., lb. .16 - .18½
tanks lb. .13½- —
S. D., dms. lb. .14¾- .17¼
tanks lb .12¼- —
Sparteine sulfate, cns., 100 oz. or more oz. .80 - —
Spearmint leaves, dom. bls lb. 75 - —
Spearmint oil, NF, dms lb. 5.50 - —
Sperm oil, bleached, winter, 45°, dms lb. .1675- .1775
tanks lb. .1475- —
Nat., winter, 45°, dms lb. .1575- .1675
tanks lb. .1375- —
Spermaceti wax, blocks, cs lb. .32 - .33
Cakes, cs. lb. .33 - .34
Spruce oil, cns., dms. lb. 2.10 3.55
Squill, white, bls. lb. .16 .18
Powd., bbls., bxs. lb. .17 - .20
St. John's bread, edible, bls. lb. .17 —
Stannic chloride, anhyd dms., works lb. .817 - .839
Stannic oxide, dms., dlvd. lb. 1.10 - 1.11
Stannous chloride anhyd dms., works lb. 1.013 - 1.268
Hydrous, cryst., dms., works lb. .87½- .88½
Stannous sulfate, dms., works lb. 1.067 - 1.087
Star root (see Helonias root).
Stargrass root (see Aletris root.)
Stavesacre seed, bgs. lb. .60 .61
Stearic acid, dbl., pressed, bgs. lb. .15¼- .17¾
Single-pressed, bgs. lb. .14¼- .17¼
Triple-pressed, bgs. lb. .17 - .19½
Stearine, oleo (see Oleostearine.)
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 - —
tanks, Houston gal. .1475- —
tanks, group 3 gal. .12875- —
Stramonium leaves, bgs. lb. .13 - —
Streptomycin sulfate, bulk, gram. .035 - .036
Strontium bromide, NF, cryst., gran., 150-lb. dm., frt. equald lb. 1.00 - —
Strontium carbonate, pure, dms., 5-ton lots or more, works lb. .35 - —
dms., 1-ton lots, works lb. .37 - —
Tech., dms., works lb. .19 - —
Strontium chromate, fib. dms., dlvd. lb. .48 - —
Strontium iodide, jars, 25-lb. lots lb. 3.57 - —
Strontium nitrate, bgs., c.l., works. 100 lbs. 11.00 - —
bgs., l.c.l., works 100 lbs. 12.00 - —
Strontium salicylate, NF, dms lb. 1.88 - —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works. ton.56.70 -66.15
Strophanthin G (see Quabain, USP).
Strophanthin K bots. oz. 25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs lb. 3.50 - 3.75
Styrax gum, USP, cs. lb. 4.50 - 5.50
Styrene monomer, polymer grade, 99.6%, dms., c.l., frt. alld. lb. .17 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .14½- —
Styrene monomer, tech., 99.2%, dms., c.l. lb. .1504- —
dms., l.c.l., same basis lb. .1704- —
tanks lb. .1254- —
Above prices are escalated for each calendar quarter on the basis of cost of benzene and petroleum refining labor.
Styrolyl acetate, bots. lb. 1.10 - —
Succinic acid, purif., cryst., dms., t.l., frt. alld lb. .62 - —
dms., l.t.l., same basis lb. .63 - .75
Succinic anhydride, dms., c.l., t.l., dlvd lb. .51 - —
dms., l.c.l., same basis lb. .52 - —
Sucrose, refd., white, bgs., refy E. lb. .0970- —
Sucrose acetate, isobutyrate, 90%, dms., t.l., dlvd lb. .33½- —
dms., l.t.l., same basis lb. .35 - —
tanks, same basis lb. .31 - —
100%, t.l., dms., dlvd. lb. .35½- —
l.t.l., dms., same basis lb. .37 - —
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs., l.c.l., works lb. 1.00 - —

Hello. My name's
Nosey.
I'm the Esso Solvents Expert on odor control.
Production problems, eh?
Not only that, but the solvent odor is terrible...and frankly, the delivery service isn't much better!
You can solve these problems with our Esso Solvents noted for superior odor and high solvency. Delivered fresh and uncontaminated from modern, conveniently located terminals
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SOLVESSO 100
LAKTANE
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If you need help with your production difficulties, contact your nearest Esso office. And tell 'em Nosey sent you!
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ESSO STANDARD,
Division of Humble Oil & Refining Company,
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In industry after industry..."ESSO RESEARCH works wonders with oil"

Sugar (see Sucrose).			
Sugar cane, wax, dom., refd., slabs,			
80-lb. ctns., works	lb.	.60 -	.65
80-lb. ctns., spot	lb.	.65 -	.75
Sulfabenzamide, dms.	kilo	8.80	9.90
Sulfabenzamide-sodium, dms.	kilo	9.00	-10.10
Sulfacetamide, USP, fib. dms	kilo.	6.61	6.83
Sulfacetamide-sodium, USP, fib. dms	kilo	8.15	9.25
Sulfadiazine, USP, microcrystals, dms	kilo.	23.35	24.45
USP, powd., dms.	kilo.	22.60	23.70
Sulfadiazine-sodium, USP, dms	kilo.	24.80	25.90
Sulfaguanidine, NF X, dms	kilo	5.50	6.60
Sulfamerazine-sodium, USP, powd., dms	kilo.	24.80	25.90
Sulfamethazine, USP XV, microcrystals, dms	kilo.	19.65	20.75
USP XV, powd., dms.	kilo.	18.75	19.85
Sulfamic acid, cryst. dms., c.l., t.l., works	100 lbs	16.00	—
dms. l.c.l., t.t.l., works	100 lbs.	17.50	18.50
Gran., dms., c.l., t.l., works	100 lbs.	14.75	—
dms., l.c.l., t.t.l. works	100 lbs.	16.25	-17.25
Sulfanilamide, NF, reg., 1,000 lb., frt. equald	lb.	1.50	- —
NF, fib dm., frt equald	lb	1.55	- —
Sulfanilamide quinoxaline, veterinary, dms	kilo.	16.28	- —
Sulfanilic acid, tech. dms. c.l., frt. alld	lb.	.21	- —
dms., l.c.l., frt alld	lb.	.23	- —
Sulfapyridine, USP XV, powd., bots., tins	kilo.	15.45	-16.55
Sulfapyridine-sodium, monohydrate, dms	kilo.	16.55	-17.65
Sulfathiazole, NF X, microcrystals, dms	kilo.	6.25	6.90
NF X, powd., dms.	kilo.	5.50	6.15
Sulfathiazole-sodium, NF X, dms., 1,000-lb. lots or more	lb.	2.35	- —
Sulfur, coml., flour, bgs., mines	100 lbs.	2.35	- —
bbls., mines	100 lbs.	3.20	- —
lump, bgs., mines	100 lbs.	2.25	- —
bbls., mines	100 lbs	2.80	- —
Sulfur, crude, dom., bright, bulk, f.o.b. cars, mines	long-ton.	23.50	- —
export, f.o.b vessels, Gulf ports.	long-ton.	25.00	- —
US and Canada, f.o.b vessels Gulf ports	long-ton.	25.00	- —

Domestic dark sulfur prices are $1 per long-ton lower.

Sulfur, crude, imp., Mexican, bulk, filtered, f.o.b., vessel, Coatzacoalcos	long-ton.	24.00	- —

Mexican dark sulfur price is $1 per long-ton lower.

Sulfur, refd., flowers, NF, bgs., mines	100 lbs.	5.65	- —
bbls., mines	100 lbs.	7.00	- —
flour, light, bgs., mines	100 lbs.	5.25	- —
bbls., mines	100 lbs.	6.25	- —
lump, bgs., mines	100 lbs.	4.95	- —
rolls, bgs., mines	100 lbs.	5.50	- —
bbls., mines	100 lbs.	6.25	- —
salf block, bgs., mines	100 lbs.	4.65	- —
virgin block, bbls., mines	100 lbs.	4.70	- —
Sulfur, rubbermakers, coml., reg., bgs., mines	100 lbs.	2.45	- —
bbls., mines	100 lbs.	3.70	- —
98-100%, passing through 325 mesh, bgs., mines	100 lbs.	2.55	- —
bbls., mines	100 lbs.	3.80	- —
refd., bgs., mines	100 lbs.	4.90	- —
bbls., mines	100 lbs.	6.05	- —
treated, 2.5% mineral oil, bgs., mines	100 lbs.	2.75	- —
bbls., mines	100 lbs.	4.00	- —
Sulfur dichloride, ret. dms., c.l., works, frt. equald	lb.	.05¼	- —
ret. dms., l.c.l., same basis	lb.	.06¼	- —
tanks, same basis	lb.	.04½	- —
Sulfur dioxide, liq., coml., cyls., works, frt. equald	lb.	.10	- .12
multi-unit cars, works	lb.	.0535	- —
tanks, works	lb.	.045	- —
Sulfur dioxide, refrigeration, cyls., dlvd	lb.	.33	- —
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald	lb.	.05¼	- —
dms., l.c.l., same basis	lb.	.06¼	- —
tanks, same basis	lb.	.04½	- —
Sulfuric acid, 60° Be, cbys., c.l., works	100 lbs.	2.00	- —
cbys., l.c.l., works	100 lbs.	2.30	- —
tanks, works	ton.	18.60	- —
66° Be, cbys., c.l., works	100 lbs.	2.25	- —
cbys., l.c.l., works	100 lbs.	2.55	- 3.35
tanks, works	ton.	22.35	- —
98%, tanks, works	ton.	23.50	- —
99%, tanks, works	ton.	23.70	- —
100%, tanks, works	ton.	23.95	- —
CP, NF, consumers' cbys., c.l., frt. equald	lb.	.12¾	- —
Sulfuric acid, CP, NF, consumers', cbys., l.c.l., same basis.	lb.	.14¼	- .14¾
5-pt. bots., extra, cs., c.l., works, frt. alld	lb.	.16¼	- —
5-pt. bots., extra, cs., l.c.l., same basis	lb.	.17¾	- .18¼
Sulfuric acid, fuming (oleum), 20%, tanks, works	ton.	25.00	- —
40%, tanks, works	ton.	29.00	- —
65%, tanks works	ton.	39.50	- —
Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk, c.l., Baltimore	unit-ton.	.90	- .93
bulk, c.l., Carteret, N. J.	unit-ton.	.90	- .93
bulk, f.o.b. vessel at Fla.	unit-ton.	1.03	- —
Superphosphate, triple, 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla.,	unit-ton.	1.00	- —
Sweet birch oil, USP, northern, cns	lb.	4.00	- 9.50
USP, southern, cns	lb.	2.00	- 3.05

T

2,4,5-T, dms., c.l., works, frt. equald.	lb.	1.18	- —
dms., l.c.l., same basis	lb.	1.25	- —
2,4,5-T, isopropyl ester, dms., c.l., works, frt. equald	lb.	1.24	- —
dms., l.c.l., works	lb.	1.29	- —
Talc, dom., fibrous, grd., bgs., c.l., works, New York	ton.	28.00	- —
bgs., l.c.l., works	ton.	31.00	-36.00
fibrous, 99.5%, 325 mesh, bgs., c.l., works, New York	ton.	31.00	- —
bgs., l.c.l., works	ton.	34.00	- —
Talc, dom., fibrous, 99.95%, 400 mesh, micronized, bgs., c.l works	ton.	38.00	- —
625 mesh, micronized, bgs., c.l., works	ton.	80.00	- —
ord., Calif., grd., bgs., c.l., works	ton.	34.00	-39.50
Vermont, off-color, grd., bgs., c.l., works	ton.	19.40	- —
bgs., l.c.l., works	ton.	37.00	- —
Imp., Canadian, grd., bgs., c.l., mines	ton.	20.00	-35.00
Tall oil, crude, dms., c.l., works	lb.	.04¼	- .04½
tanks, works	lb.	.02½	- .03
Dist., depending on grade, dms., c.l., works	lb.	.06½	- .07¼
dms., l.c.l., works	lb.	.07	- .08
tanks, works	lb.	.04½	- .05¼
Tall oil, refd., depending upon grade, dms., c.l., works	lb.	.07¼	- .09
dms., l.c.l., works	lb.	.07½	- .09¼
tanks, works	lb.	.05¼	- .06¾
Tall oil acids, dms., c.l., works	lb.	.07	- .10
dms., l.c.l.	lb.	.07½	- .10½
tanks, works	lb.	.05	- .08
Tallow, edible, tanks, dlvd	lb.	.08¾	- —
Inedible, fancy, bleachable, tanks.	lb.	.05⅝	- —
fancy, guaranteed, bulk, f.o.b. steamer	lb.	.06¼	—
dms., f.a.s.	lb.	.07¼	- —
tanks, dlvd.	lb.	.05¾	- .05⅞
No. 1, tanks, dlvd.	lb.	.04¾	- .04⅞
Prime, tanks, dlvd	lb.	.05⅛	- —
Special tanks, dlvd	lb.	.05¼	- —
Sulfonated, 25%, bbls., l.c.l	lb.	.08½	- .08¾
50% bbls., l.c.l.	lb.	.10½	- .11
Tallow acids, dist., dms	lb	.11¾	- .14¼
tanks	lb.	.09¼	- —
Hydrogenated, dms.	lb.	.14¼	- .16¾
Tallow oil, acidless, dms., c.l.	lb.	.13½	- —
dms., l.c.l.	lb.	.14½	- .15½
Tangerine oil, Florida, dms	lb.	4.75	- —
Tankage, animal, feeding, 9-11% ammonia, New York bulk	unit-ton.	4.75	- 5.00
Tannic acid, NF, fluffy, bbls., 1,000-lb. lots	lb.	2.05	- —
bbls., smaller lots	lb.	2.06	2.07
NF, powd., bbls., 1,000-lb. lots	lb.	1.95	- —
bbls., smaller lots	lb	1.96	1.99
Tech., dms.	lb.	1.05	- —
Tansy oil, dms	lb.	6.00	8.00
Tar acid oil, 15-18%, dms., c.l., frt equald	gal.	.53½	- —
dms., l.c.l., same basis	gal.	.55½	- —
tanks, same basis	gal.	.43½	- —
Tar acid oil, 25-28%, dms., c.l., same basis	gal.	.60	- —
dms., l.c.l., same basis	gal.	.62	- —
tanks, same basis	gal.	.50	- —
50-53%, dms. c.l., same basis	gal.	.75	- —
dms., l.c.l., same basis	gal.	.77	- —
tanks, same basis	gal.	.65	- —
Tar, coal (see Coaltar).			
Tartar emetic (see Antimony potassium tartrate).			
Tartaric acid, NF, 100-lb. bgs., c.l., frt. equald	lb.	.41	- —
bgs., 10,000 lbs. 1 shipt., same basis	lb.	.43	- —
bgs., smaller lots, same basis	lb.	.47	- —
Terpine hydrate, NF, cryst., powd., 100-lb. fib. dms	lb.	.70	- —
Terpineol, extra, dms	lb.	.50	- .60
Prime, dms.	lb.	.40	- .50
Terpinyl acetate, extra, cns., dms.	lb.	.64	- .75
Prime, dms	lb.	.53	- .56
Terpinyl propionate, dms.	lb.	1.70	- —
Testosterone, USP, bots.	gram.	No prices.	
Testosterone propionate, USP, bots.	gram.	No prices.	
Tetrachloroethane, dms., works	lb.	.14½	- —
Tetrasodium pyrophosphate (see Sodium pyrophosphate).			
Tetrachloroethylene, tech. (see Perchloroethylene).			
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works	lb.	.20½	- —
dms., l.c.l., works	lb.	.22	- .23½
Tetraethyl orthosilicate, dms., c.l., dlvd. E	lb.	.60	- —
dms., l.c.l., dlvd. E	lb.	.61½	- —
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald	lb.	.75	- —
Tetraethylenepentamine, dms., c.l., dlvd. E	lb.	.53½	- —
dms., l.c.l., dlvd. E	lb.	.55	- —
tanks, dlvd. E	lb.	.51	- —
Tetraethylthiuram disulfide, tech., dms., frt. alld	lb.	1.04	- —
Tetrahydrofuran, dms., c.l., t.l., works	lb.	.36½	- —
dms., l.c.l., or t.t.l., works	lb.	.37	- —
tanks, works	lb.	.35	- —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn.	lb.	.31½	—
dms., l.c.l., Memphis, Tenn	lb.	.32½	—
dms., c.l., t.l., Newark, N.J	lb	.33½	—
dms., l.c.l., Newark, N.J	lb.	34½	—
tanks, dlvd E of Denver	lb.	31	—
tanks, dlvd W of Denver	lb.	.32	—
Tetrahydrophthalic anhydride dms., c.l., t.l., frt. alld. E	lb.	.39	- —
l.c.l., t.t.l., same basis	lb.	.41	- —
Tetrapotassium phosphate (see potassium phosphate).			
Thallium metal, dlvd	lb.	7.50	-10.00
Thallium sulfate, 99%, bots., dlvd.	lb	5.00	10.00
Theobromine, NF fib dms., 100-lbs., f.o.b., works	lb.	4.40	5.50
Theobromine and sodium acetate, USP, fib. dms., 500-lbs. works	lb.	6.45	- —
Theobromine, sodio-salicylate, NF, fib dms., 500-lbs., works.	lb.	3.80	- —
Theophyline, USP, anhyd., 100-lb. dms., frt alld	lb.	3.65	- —
Thiamine hydrochloride, USP, fib. dms., frt alld	kilo.	36.00	- —
USP, ampule grade, fib., dms., frt. alld	kilo.	38.00	- —
Thiamine mononitrate, USP, fib. dms., frt. alld	kilo.	36.00	- —

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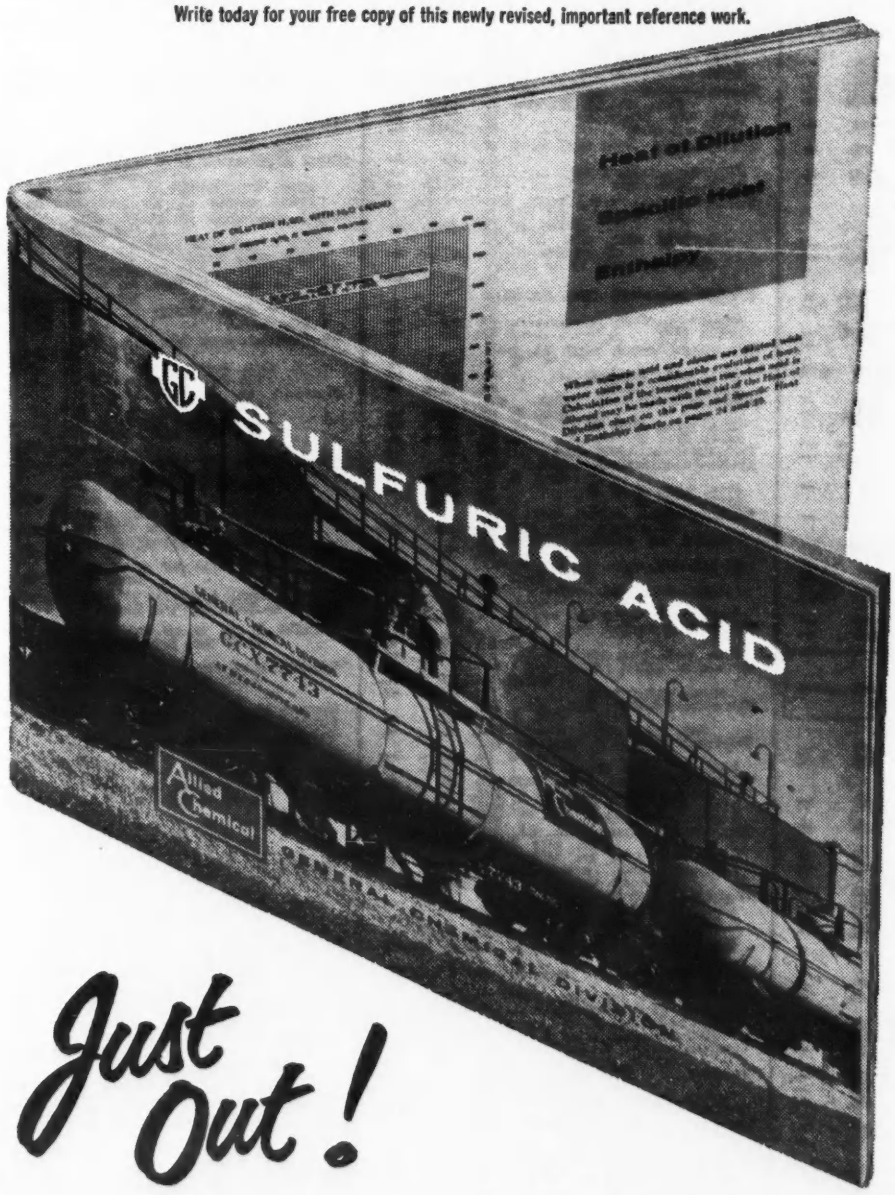

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Thiocarbanilide, dms., ton lots lb 72 - —
dms., less ton lots lb 74 - —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb 5.20 - —
Tungstated, PTMA, kgs., works lb 6.20 - —
Thioglycolic acid, refd., 55 gal dms., ton lots, 100% basis lb 1.15 - —
Thiosalicylic acid, 80%, dms., 1,000-lb., lots, works lb 4.00 - —
Thiourea, tech, bgs., t.l. frt alld lb .30 - —
bgs., ton lots, same basis lb 32 - —
bgs., less than ton lots, same basis lb .33 - —
Thorium nitrate, purif., fib dms., 100-lb. lots or more works lb 3.50 - —
dl Threonine, bots, 1-kilo lots kilo 275.00 - —
Thyme leaves, French, triple sifted extra, bgs lb 28 - —
Spanish, extra bgs lb 11 - —
triple sifted, bgs lb 25 - —
Spanish, bgs lb .09 - —
Thyme oil NF red, cns., dms lb 1.80 3.00
NF, white, cns lb 2.10 3.20
Tech, white cns lb 40 1.85
Thymol, fib dms., 25-lbs., f.o.b works lb 3.06 —
Thymol iodide NF, dms., 100-lbs f.o.b works lb 7.40 - —
Timbo root (see Cube root)
Tin chloride (see Stannous chloride, anhyd.)
Tin crystals (see Stannous chloride, hydrous)
Tin metal (Straits) lb. 1.03 - —
Tin oxide (see Stannic oxide)
Tin sulfate (see Stannous sulfate).
Tin tetrachloride anhyd (see Stannic chloride anhyd.)
Titanium dioxide anatase, ceramic, bgs., c.l., dlvd lb .25½- —
bgs., l.c.l., dlvd lb 26½ —
reg., bgs., c.l., dlvd lb 25½- —
bgs. l.c.l. dlvd lb 26½- —
metallurgical, nat., bgs., c.l., f.o.b Jacksonville, Fla ton 180.00 —
bgs., 5-ton lots, Niagara Falls, N Y ton 205.00 —
bgs., ton lots, same basis ton 215.00 —
Milled metallurgical titanium dioxide $7.50 per ton higher
Titanium dioxide, rutile, nonchalking, bgs., c.l., dlvd E lb 27½- —
bgs. l.c.l., dlvd E lb 28½- —
Titanium dioxide-calcium pigment, 30% Ti O_2, reg., bgs., c.l., dlvd lb 09⅜- —
bgs., l.c.l., works lb 09⅞- —
50% Ti O_2, high-tinting, dms. c.l., lb 14⅜- —
dms. l.c.l lb .14⅞ —
Titanium hydride, powd., dms., works lb 8.10 9.00
Titanium tetrachloride, tech. dms., c.l., works lb 26 —
dms., l.c.l., works lb 27½- .29
tanks, works lb 20 - —
Tobias acid, dms., c.l., t.l lb. .81 - —
dms., l.c.l. lb. .84 - —
d-a Tocopherols NF, mixer, conc. pure basis, bots kilo 67.00 —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo 122.00 - —
d-a-Tocopheryl acid succinate, cryst., bots kilo 109.00 —
dl-a-Tocopherol bots kilo 99.00 —
dl-a-Tocopheryl acetate, bots kilo 90.00 —
25% dry powd., bots kilo 22.50 - 24.00
33⅓ dry powd. bots. kilo 30.00 31.50
o-Tolidine base dry, kgs., 100% basis lb 1.55 —
Paste, kgs., 100% basis lb 1.50 —

TOLUOL
Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine hydrochloride paste, kgs., 100% basis lb 1.50 —
Tolu balsam, cns lb 3.50 3.65
Toluene, coaltar, indust., or nitration, tanks, dlvd E of Rockies gal. .25 - —
Toluene, petroleum indust., tanks, dlvd E of Rockies gal. .25 - —
p-Toluenesulfonamide, powd., dms., t.l., works lb .60 - —
dms., l.t.l., same basis lb .63 - —
Toluenesulfonic acid, 55-gal. dms., t.l., frt. alld lb .16 - —
1,000-lb or more, same basis lb .18 - —
less than 1,000-lb., same basis lb .23 - —
tanks, same basis lb .14 - —
Toluenesulfonic acid in 10-gal. dms., 2c. per lb more.
p-Toluenesulfonic acid monohydrate, dms., c.l., or t.l lb .90 - —
dms., 125 lbs. to t.l. lb 1.00 - —
m-Toluidine, dms., c.l., works, frt. alld lb .83 - —
dms., l.c.l., same basis lb .84 - —
tanks, same basis lb .82 - —
o-Toluidine, dms., c.l., works, frt. alld lb .30 - —
dms., l.c.l. same basis lb .31 - —
tanks, same basis lb .28 - —
p-Toluidine, tech., flake, dms., frt. alld lb .50 - —
Cast, dms., frt. alld lb .45 - —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs, works lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt. alld lb. 1.10 - —
Tonka beans, Angostura, cks. lb 1.50 - —
Brazilian, Surinam, cs. lb. 1.30 - —
Totaquine, 100-oz lots, cns. oz. .42 - —
Toxaphene, dms., c.l., t.l., works, lb. .22 - —
dms., l.c.l., l.t.l., works lb. .28 - —
Tragacanth gum, No. 1, ribbons, cs lb 4.10 - 4.20
No. 2, cs. lb. 3.75 - 3.80
No. 3, cs. lb. 3.40 - 3.65
USP, powd., bbls. lb 1.05 1.15
Triacetin dms., c.l., dlvd, E. of Rockies lb. .39 - —
dms., l.c.l., same basis lb. .40 - —
tanks, same basis lb. .37 - —
Triallylamine, dms., c.l., dlvd lb. .985 - —
dms., l.c.l., dlvd. lb. .995 - —
tanks, dlvd lb .96 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver, lb. .42½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .43½- —
tanks, frt alld E of Denver lb. .40 - —
Tributyl phosphate, dms., c.l., works, lb. .52½- —
dms, l.c.l., same basis lb. .53½- —
tanks, same basis lb. .50 - —
Tributylamine dms., c.l., works lb. .67½- —
dms., l.c.l., same basis lb .69 - —
tanks, same basis lb .65 - —
Tributyrin, dms., l.c.l., dlvd. lb. .69 - —
Trichloroacetic acid, tech., 300-lb. dms., c.l., f.o.b. works lb. .52 - —
USP, 100-lb. dms., frt. equald. lb. 1.25 - —
Trichlorobenzene dms. c.l., trt alld E lb .15 - —
dms., l.c.l. frt. alld E. lb .16 - —
tanks, frt. alld E lb. 13¼ —
Trichlorobenzene prices in the West 1¾c. higher.
1,1,1-Trichloroethane, dms., c.l., dlvd lb .13¼- —
dms, l.c.l., dlvd. lb .16¼- —
tanks, dlvd lb .12¼- —
1,1,2-Trichloroethane, dms., c.l., works lb. .13½- —
dms., l.c.l., dlvd. E. lb. .14¼- —
tanks, works lb. .11½- —
Trichloroethylene dms. c.l., or t.l., dlvd lb .14 - —
dms., l.c.l., dlvd. lb .15¼- —
tanks, dlvd lb .12¾- —
Trichloroisocyanuric acid dms., c.l., t.l., frt equald lb .65 - —
dms. l.c.l. same basis lb .75 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., ret. chys. works, frt adjusted, lb 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
dms., l.c.l., dlvd. lb. .36 - —
tanks, dlvd lb. .32½- —
Tricresyl phosphate, petroleum, dms., c.l., dlvd lb. .34½- —
dms., l.c.l., dlvd lb. .35½- —
tanks, dlvd lb. .32½- —
Tridecyl alcohol, mixed isomers, dms., c.l. dlvd E lb .28½- —
dms., l.c.l., dlvd. E lb .28 - —
tanks, dlvd E lb .24 - —
Triethanolamine dms. c.l. dlvd E. lb .24½- —
dms., l.c.l., same basis lb. .26 - —
tanks, same basis lb .22 - —
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld lb .25½- —
dms., l.t.l., frt alld. lb. .26½- —
tanks, frt alld. lb. .24½- —
Triethylamine, dms., c.l., dlvd E. lb. .50 - —
dms., l.c.l., same basis lb .51½- —
tanks, same basis lb .47½- —
Triethyl nitrate, refd., tech., non-ret dms., c.l., frt alld E. of Denver lb. .46¼ —
non-ret dms., l.c.l., frt alld. E. of Denver lb. .47¼- —
tanks, frt alld E of Denver. lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd. lb. .40½- —
dms., l.c.l., dlvd. lb. .42 - —
tanks, dlvd. lb. .38 - —
Triethylene glycol, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E lb. .22½- —
tanks, same basis lb. .18½- —
Triethylenetetramine, dms., c.l., dlvd. E lb. .51½- —
dms., l.c.l., dlvd E lb. .53 - —
tanks, dlvd E lb. .49 - —
Triisobutylene, tanks, dlvd. lb. .08 - —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .23¼- —
dms., l.c.l., dlvd. E lb. .24¾- —
tanks, dlvd E lb. .20¾- —
Trimethylamine anhyd., cyls., l.c.l., frt. equald. 100% basis lb. .38 .305
tanks, frt. equald. 100% basis, lb. .26 - —
25-40% soln., dms. c.l., frt. equald, 100% basis lb. .35 - —
dms., l.c.l. frt. equald, 100% basis lb. .35½- —
tanks, 100% basis frt equald lb. .26 - —
Trimethylolpropane, dms., c.l., t.l., dlvd. E lb. .35 - —
Trioxanes, pure, dms. c.l., t.l., works lb. .50 - —
dms., l.c.l., works lb. .51½- —
Tripentaerythritol, bgs., c.l., t.l., dlvd E lb. .40 - —
bgs., l.c.l., t.l., dlvd E lb. .41 - —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .41½- —
bbls., l.c.l., frt equald lb. .43½- —
Triphenylguanidine, bbls., works lb. .90 - —
Tripropylene dms., c.l., dlvd. E gal. .44 - —
dms., l.c.l., same basis gal. .54 - —
tanks, same basis gal. .28 - —
Tripropylene glycol, dms., c.l., t.l., frt alld E lb. .20½- —
dms., l.c.l. t.l. frt alld. E lb. .22 - —
tankcars and compartmented tankcars, frt alld E lb. .17½- —
Tripropylene glycol, tankwagon and compartmented tankwagons, 1,000 gals. min. frt, alld E lb. .18 —
Tripropylene glycol prices 1c. per lb higher in west.
Trisodium phosphate (see Sodium phosphate tribasic).
dl-Tryptophane fib. dms works lb 55.00 —
Tung oil, dms., New York lb. .24 - .24½
tanks, imported, N. Y. lb. .22¼- 22½
tanks, domestic, mills lb. .22½ Nom.
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb 4.25 —
Tungstic acid, tech., dms., 1,000-lb lots, works lb 2.25 - —
dms., smaller lots, works lb 2.45 - —
Turkey red, bbls., works lb. 62 —
Turpentine, gum (see Protective Coatings market, Naval Stores)
Turpentine oil NF, cns., dms lb. .28 .50
Tuscan red, bbls., frt. equald lb. .26 - .32
Tyrothricin, USP, 1 to 5 kilos gram. .54 - —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd. E. of Rockies lb. .30½- .35
Jobbing types, dry, bbls., same basis lb. .16 - .22½
Regular types, dry bbls., same basis lb. .16 - .37½
Ultramarine blue prices 1c. higher W. of Rockies.
Umber pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾
bgs., l.c.l., works lb. .07¾- .08
Umber pigment, burnt, turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y lb. .08¼- —
Raw, American, bgs., works lb. .07¾- .08¼
Turkey-type, bgs., works lb. .08½- .08¾
Undecylenic acid, 55-gal. dms., f.o.b. works lb. 1.28 - —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 46% N, indust., bgs., c.l., t.l., dlvd. E ton. 125.00 - —
bgs., l.c.l., dlvd. E. ex whse. ton. 145.00 - —
45% N, agricultural, bgs., c.l., (30 tons) dlvd. E ton. 103.00 - —
Urea-ammonia liquor A, B, C & F grades, N basis, tanks, frt. equald ton. 120.00 - —
37 grade, tanks, same basis ton. 145.00 - —
Urethane, USP, dms., t.l., f.o.b., works lb .65 - —
dms., l.t.l., same basis lb. .70 - —
Uva-ursi leaves, bls lb. .12 - —

V

Valerian root, Belgian bgs. lb. .32 - —
Indian, bgs lb. .25 - —
dl-Valine, dms., works lb 21.00 - 27.50
Vanadium pentoxide, tech., dms. works lb 1.38 - —
Vandyke brown, bbls. works lb 09½- .12
Vanilla beans, Bourbon, tins lb. 9.50 - —
Mexican cuts, tins lb. 9.50 - —
whole, tins lb. 10.00 - —
Vanillin ex lignin, 100-lb fib dms., 2,000-lb. lots or more lb. 2.50 - —
less than 2,000 lbs lb. 2.70 - —
Venetian red jobbing, bgs., works lb. .0475- —
Venetian red, 20%, bgs., works lb. .0525- —
25% bgs., works lb. .0575- —
30% bgs., works lb. .06 - —
35% bgs., works lb. .0625- —
40% bgs., works lb. .0675- —
Vetiver oil Bourbon, cns. lb 17.25 17.50
Haitian, cns lb. 14.00 -14.50
Victoria blue toner, molybdated, PMA 250-lb bbls., dlvd. E of Rockies lb. 4.50 4.95
Tungstated, PTMA, 250-lb bbls., dlvd. E of Rockies lb 5.55 —
Victoria blue toner, bbls, prices 1c higher W of Rockies
Vinyl acetate monomer, zone 1, 55-gal dms., c.l., dlvd lb. .1810- —
55-gal dms., l.c.l., dlvd lb. .1960- —
tanks, dlvd. lb. .1560- —
tanktrucks less than 4,000 gal. dlvd lb. .1610- —
Zone 2, 55-gal. dms., c.l., dlvd lb. .1910- —
55-gal. dms., l.c.l., dlvd lb. .2210- —
tanks, dlvd. lb. .1660- —
tanktrucks, less than 4,000 gals., dlvd lb. .1710- —
Zone 1 is all continental US except zone 2, zone 2 comprises Ariz., Calif., Idaho, Mont., Nev., Ore. Utah and Wash.
Vinyl n-butyl ether, tech. dms., l.c.l. works lb. .50 - —
Vinyl chloride monomer, tanks, works lb .125 - —
Vinyl ether, USP, anethesia, bots., 50cc., hospitals bot 1.12 - —
bots., 75cc., hospitals bot 1.56 - —
Vinyl ethyl ether tech dms., c.l., works lb. .29¼- —
dms., l.c.l., works lb .30 - —
tanks, works lb .27¼- —
Vinyl propionate monomer, dms., c.l., dlvd lb. .49 - —
dms., l.c.l., same basis lb .50 - —
tanks, same basis lb .47 - —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms to tanks, works lb 1.20 - —
1 to 9 dms., works lb 1.35 - —
tanks, works lb 1.15 - —
Vinyltoluene, dms., c.l., f.o.b., works, lb. .16½- —
dms., l.c.l., same basis lb. .18½- —
tanks, f.o.b dest. frt prepaid lb. .14 - —
Viosterol in nat vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units .02½- —
Virginia type red, bbls., works lb. 1.40 - —
Vitiamin A acetate, syn., cryst., beads 500,000 A units per gram gram .07¼- —
Vitamin A acetate dry, 500,000 units per gram, kilo lots kilo. 65.00 - —
325,000 units per gram, same basis kilo. 43.88 - —
250,000 units per gram, same basis kilo. 33.75 - —
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher
Vitamin A, liq in oil, 1,000,000 A units per gram 1,000,000 units. .09½- —
Vitamin A palmitate liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .09½- —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams vials, tins gram. 83.00 - —
0.1% vitamin B_{12}, USP adsorbed on gelatin, 100 and 500-gram bots on 1-5 kilo dms gram. 1.00 - —
0.1% vitamin B_{12}, USP adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms., gram. 1.00 - —
Vitamin B_{12}, oral grade solids in containers of 1 and 10 gram of B_{12} activity gram. 85.00 - —
0.1% trituration of cryst., B_{12} with dicalcium phosphate or mannitol, 1-10 kilo. 95.00 - —
Vitamin B_{12}, 0.1% cobalamin concentrate, NF, adsorbed on resin, 500-gram bots., 1-5 kilo, dms. frt alld gram. .90 - —
0.1% cobalamin concentrate in gelatin, 1-10 kilo dms., frt alld gram. .90 - —
Vitamin C (see Ascorbic acid).
Vitamin D, (see Codliver and Fishliver oils, Calciferol and Viosterol).
Vitamin D, dry, 850,000 units per gram, kilo lots kilo. 42.50 - —
850,000 units per gram less than kilo lots kilo. 45.00 - —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root bark, bls. lb. 2.00 - 2.25
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.95 - —
dms., 25-49-lb. lots, New York or Chicago lb. 2.05 - —
dms., 5-24-lb. lots, New York or Chicago lb. 2.15 - —
Watchung-type reds., bbls lb. 1.95 - —

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms. gal. 12.25 - —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls. lb. .21 - .22
White precipitate, USP, powd., dms., 100 lbs., f.o.b. works lb. 5.50 - —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls lb. .22 - —
Thin, rossed, bls. lb. .22 Nom.
Wintergreen oil, USP nat. northern, cns lb. 6.35 -17.50
USP, nat. southern cns lb. 3.75 - 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls lb. .16 - .17
Witch hazel leaves, bls. lb. .27 - .28
Wollastonite fine bgs., c.l., works, ton. 39.80 - —
bgs., l.c.l., ex whse ton. 56.00 - —
Medium, bgs., c.l., works ton. 27.00 - —
bgs., l.c.l., ex whse ton. 44.00 - —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat crude (see Degras).
Woolfat USP (see Lanolin).
Wormseed Levant bgs. lb. 2.50 - —
Wormseed oil (see Chenopodium oil NF).
Wordwood oil, cns. lb. 4.50 - 4.75

X

Xylene coaltar, indust., tanks, works:
Bethlehem, Pa. gal. .29 - —
Birmingham dist. gal. .29 - —
Chicago dist. gal. .28½- —
Cleveland dist. gal. .29 - —
Geneva, Utah gal. .29 - —
Johnstown, Pa. gal. .29 - —
Lackawanna, N. Y gal. .29½- —
Lone Star, Tex. gal. .27 - —
Lorain, Ohio gal. .29 - —
Middletown, Ohio gal. .30 - —
Minnequa, Col. gal. .29 - —
Philadelphia dist. gal. .29 - —
Pittsburgh dist. gal. .29 - —
Sparrows Point, Md. gal. .29 - —
Terre Haute, Ind. gal .29 - —
Youngstown, Ohio gal. .29 - —
Xylene, petroleum, indust., tanks f.o.b works:
Bayonne N. J gal .29 - —
Baytown, Tex. gal. .27 - —
Charleston, S. C. gal. .29 - —
Chicago, Ill gal. .28½- —
Detroit, Mich., dlvd gal. .27½- .29
Houston, Tex. gal. .27 - —
Philadelphia, Pa. gal. .29 - —
Providence, R. I. gal. .30 - —
Sewell's Point, Va. gal. .28 - —
Wood River, Ill gal .28½- —
m-Xylene, 95% dms., c.l., f.o.b., Richmond, Calif lb. .25 - —
dms., l.c.l. f.o.b., Richmond, Calif lb. .26 - —
tanks, frt alld. lb .23 - —
o-Xylene, dms., c.l., works lb .08 - —
dms., l.c.l., works lb .09 - —
tanks, works lb .06 - .06½
p-Xylene dms. c.l., works lb .20 - —
dms., l.c.l., works lb .21 - —
tanks, frt alld lb .1645- —
Xylenol cryst. 45°-47°C., m.p., dms., l.c.l., works, frt. equald lb. .23 - —
56°-58°C., m.p. dms., l.c.l., works, frt equald lb. .33 - —
Xylenol, cryst., 60°-62°C., m.p., dms., l.c.l., same basis, lb. .40 - —
Xylenol fraction, b.r 7°-9° C., dry above 227° C., dms., c.l., same basis gal 1.25 - —
dms., l.c.l. same basis gal 1.30 - —
tanks, same basis gal. 1.05 - —
b.r. 7°-9° C., dry at or below 227° C., dms., c.l. same basis, gal. 1.35 - —
Xylenol fraction, b.r 7°-9° C., dry at or below 227° C., dms., l.c.l., same basis gal. 1.40 - —
2,4-Xylidine, tech., dms. frt. alld. lb. 1.15 - —
2,5-Xylidine, tech., dms. frt alld. lb. 1.20 - —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works lb .39 - —
dms., l.c.l. same basis lb .40 - —
tanks, same basis lb .33 - —

XYLOL
Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns. lb. 2.15 3.05
Yeast, brewers, debittered, USP XV, Saccharomyces, dlvd lb. .27 - —
Yeast, brewers, primary, USP XV, 150 meg. B_1 per gram, 100-lb. dms lb. .47 - —
USP XV, 270 meg., B_1 per gram, 100-lb dms lb. .52 - —
USP XV, 300 meg., B_1 per gram, 100-lb dms lb. .56 - —
USP XV, 900 meg., B_1 per gram, 100-lb. dms. lb. .60 - —
Torula, USP dlvd. lb. .18 - —

YELLOW PIGMENTS
Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow

Yerba santa leaves, bls lb 40 45
Ylang-ylang oil, Bourbon, bots lb 7.00 22.00
extra bots lb. 24.00 33.00
extra bots lb. 24.00 33.00
Yohimbine hydrochloride, bots., tins oz. 3.75 4.25

Z

Zein, bgs., 36,000-lb. lots or more, bgs. 500-lb. lots or more, dlvd lb. .343 —
bgs., smaller lots, dlvd lb. .373 —
Zinc acetate, NF, VIII, dms lb. .53 —
Tech., dms., l.t.l., works lb. .29¾- —
Zinc borate, bgs., 1,000 lbs or more, works lb. .25 - —
bgs., less than 1,000 lbs., same basis lb. .27 - —
Zinc chloride, NF, gran., dms lb. .42 - —
NF, precip., powd., dms lb. .26 - —
Tech., soln. 50%, dms., c.l., works 100 lbs. 5.80 - —
dms., l.c.l., works 100 lbs. 6.40 - —
tanks, works 100 lbs. 5.15 - —
fused, dms., c.l., works 100 lbs. 10.70 - —
dms., l.c.l., works 100 lbs. 11.20 - —
gran., fib. dms., c.l., works, 100 lbs. 11.45 - —
fib. dms., l.c.l., works 100 lbs. 11.95 - —
Zinc chromate, bbls., dlvd. lb. .29 - —
Basic, bbls., dlvd lb. .34 - —
Zinc cyanide, dms., 1,000-lb. lots or more, works lb. .55 - —
dms., smaller lots, works lb. .57 - —
Zinc dust coml. bbls., c.l., works, lb. .17 - —
Pigment, bbls., c.l., works lb. .16½- —
bbls., l.c.l., works lb. .18¼- —
Zinc fluoride, bbls., works lb. .49 .50
Zinc hydrosulfite, dms., c.l., frt. alld lb. .21½- —
dms., l.c.l., frt. alld. lb. .23½- —
Zinc metal prime western, slabs, E. St. Louis lb .13 - —
Prime western slabs, New York, lb. .13½- —
Zinc naphthenate liq. 8% Zn., dms., frt. alld lb. .27 - —
10% Zn., dms., frt. alld lb. .33 - —
Zinc nitrate, tech., cryst., bbls., works lb. .20 - —

Zinc oxide, pigment, American process, lead-free bgs. c.l., frt. alld	lb	.14½- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.15 - —
bgs., l.c.l., smaller lots, same basis	lb.	.15½- —
Zinc oxide, leaded, 35% bgs., c.l., mills, frt. alld	lb.	.15⅝- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.15⅞- —
50%, bgs., c.l., same basis	lb.	.15¾- —
pigment, American process, leaded, 50%; bgs., l.c.l., 10 tons or more, same basis.	lb.	.16¼- —
USP, gran., dms.	lb.	.26 - —
French process, green seal, bgs., c.l., mills, frt alld	lb.	.16¼- —
bgs., l.c.l., 10 tons or more, same basis	lb.	16¾- —
Zinc oxide, French process, green seal, bgs., l.c.l., smaller lots, same basis	lb.	.17¼- —
red seal, bgs. c.l. same basis.	lb.	.15¾- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.16¼- —
bgs., l.c.l, smaller lots, same basis	lb.	16¾- —
white seal, bgs., c.l., same basis	lb	.16¾- —
bgs., l.c.l., 10 tons or more, same basis	lb	.17¼- —
bgs., l.c.l., smaller lots, same basis	lb	.17¾- —
Zinc oxide, USP dms., c.l., frt alld.	lb.	.18¼- —
dms., l.c.l., 10 tons or more, same basis	lb	.18¾- —
dms., l.c.l., smaller lots, same basis	lb.	.19¼- —
Zinc phenolsulfonate, NF, gran., dms	lb.	.45 - .46
NF, powd. dms.	lb.	.48 .49
Zinc resinate precip, 7.2-7.6% Zn., dms., frt. alld	lb.	.40¼- —
Zinc silicofluoride, dms., works	lb.	.12½ .14
Zinc stearate, tech. USP. ctns. c.l.	lb.	.41 - —
ctns., l.c.l	lb.	.42 - .46
Zinc sulfate, powd., monohydrate, 36% Zn, bgs. c.l. dlvd.E.	100 lbs.	8.75 - —
bgs. l.c.l. dlvd. E	100 lbs.	9.75 - —
Zinc sulfate in bbls 40c higher.		
Zinc sulfide pure bgs. c.l. dlvd	lb.	.2530- —
Zinc undecylenate, 75-lb. fib. dms., f.o.b. works	lb.	2.04 - —
Zinc, yellow (see Zinc chromate)		
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25 - —
bbls., c.l., works	100 lbs.	10.85 - —
bbls., l.c.l., works	100 lbs.	11.35 - —
Zinc-formaldehyde sulfoxylate, basic, 300-lb dms., frt. alld	lb.	.26 - —
Normal, 250-lb. dms., frt. alld	lb.	.52 - —
Zircon (G) gran. bgs., c.l., works.	lb.	.03½- —
Zircon (G) gran., bgs., 5 tons to c.l., works	lb.	.03⅝- —
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04 - —
bgs., smaller lots, works	lb.	.06½- —
Zircon (G) milled, bgs. c.l., works.	lb.	.04½- —
bgs., 5 tons to c.l., works	lb.	.04⅝- —
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04¾- —
bgs., 500-1,999-lb. lots, works	lb.	.07½- —
Zircon (G) in barrels 1c higher.		
Zirconium acetate soln., 13% ZrO_2, dms., c.l., 30,000 lbs. min., works	lb.	.23 - —
Zirconium hydride, powd. electronic grade, dms., works	lb.	14.00 -15.00
Zirconium oxide, CP, white, grd., bbls. or bgs., works	lb.	1.50 - —
Electric-fused lump, bgs., 500 to 1,999-lb. lots, works	lb.	.48½- —
bgs., smaller lots, works	lb.	.51 - —
milled, bgs., c.l., works	lb.	.62 - —
bgs., 5-ton lots, works	lb.	.62½- —
bgs., 1-ton to 9,999-lb. lots, works	lb.	.63½- —
bgs., 500 to 1,999-lb. lots, works	lb.	.64 - —
bgs., smaller lots, works	lb.	.66 - —
Zirconium Oxide, Glass polishing grade, 94-97% ZrO_2, bgs., works	lb.	.55 - .65
Opacifier grade, 85-90% ZrO_2, bgs.,	lb.	.27 - .50
Stabilized oxide, 91% ZrO_2, milled, bgs	lb.	.62 - .85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works	lb.	.37½- —
bgs., l.c.l., smaller lots, same basis	lb.	.16⅝- —

Cyanamid Sets Defense

—*Continued from page 5*

caused foreign manufacturers to sell the material to anyone in the United States not approved by Cyanamid.

Overt effects were charged:

- Prices of melamine, melamine-containing products and consumer products made therefrom have been maintained at unreasonably high and artificial levels.
- Effective competition between manufacturers of melamine containing products has been suppressed.
- Actual and potential foreign and domestic competition in melamine has been foreclosed.
- Progress in the development of manufacturing melamine from materials other than dicyandiamine has been suppressed.
- Progress in the development of new uses for melamine has been discouraged and impeded to the detriment of the public interest.
- The public has been deprived of an ample supply of melamine and melamine-containing products.

In 1958, Cyanamid allegedly produced 50 million pounds of melamine, or more than 50 percent of the melamine produced in the world and approximately 86 percent of that produced in the US.

The complaint charges that Cyanamid has been the sole producer of melamine for sale in the United States during most of the period covered by the complaint. In 1958, it is charged, domestic sales of melamine products totaled 98,776,000 pounds valued at $39 million, with Cyanamid accounting for 60 percent of that total.

FDA Can Relax; Probers Find Only Procedural Flaws

—*Continued from page 3*

declines to say whether he also thinks the report vindicates Dr. Welch.

Dr. Welch was forced out of office last June by Kefauver committee disclosures that he had received over $287,000 from drug publications in the antibiotic field during the seven years he headed the FDA's antibiotics division.

The eleven recommendations made for changing the law and procedures have the backing of Secretary Flemming—with one exception.

Single Agency Advocated

This is a proposal that a single agency have jurisdiction over all pharmaceutical advertising. Mr. Flemming says that he is giving that one more study. When completed, he will make a recommendation to the President.

The other ten recommendations of the Bronk committee are:

- Give FDA statutory authority to require proof of efficacy as well as the safety of all new drugs.
- Authorize FDA to compel manufacturers to maintain records and submit reports of clinical experience and other relevant data not only before, but after the drug is released for sale. This is provided for in the FDA's factory inspection bill, S 3815, introduced in congress last session.
- Broaden FDA's certification procedures to cover all antimicrobial agents.
- Strengthen FDA's factory inspection authority. This also is provided for in S 3815.
- Provide for submission of complete, as well as accurate, information concerning drugs to physicians. This is an endorsement of the new labeling rules of the FDA published for comment last July 22 in the *Federal Register*.
- Provide for keeping more complete information in FDA's files concerning decisions of new drug applications, including the names and opinions of those persons involved. Mr. Flemming has ordered a rule to this effect to be drafted.
- "Utmost" support be given to staff members in their efforts to obtain submission of truly scientific information on the efficacy and safety of drugs. Secretary Flemming has ordered this recommendation to be carried out.
- Support FDA in its efforts to maintain a stronger research program on methodology and standardization of drug testing. FDA has recently increased work in this area and plans to broaden it further.
- Establish an advisory organization of scientific and technical experts to support and aid FDA in framing policy. Mr. Flemming has directed Food & Drug Commissioner George Larrick to draw up a proposal to implement this recommendation.
- Increase appropriations for FDA to enable it to employ and retain larger numbers of highly qualified personnel.

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Prices of "Pilot PPO" (2,5-Diphenyloxazole), a high-purity scintillation grade fluor, have been reduced 50 percent across the board by Pilot Chemicals, Inc., Watertown, Mass. The Pilot brand is described as the purest available with maximum light output and high melting point.

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Cellase 1000 is derived from a specially grown strain of *Aspergillus niger.* Chemically it is a highly purified enzyme capable of depolymerizing cellulosic polysaccharides of high molecular weight into fragments of low molecular weight. The exact constitution and nutritional utility of the hydrolysis products depend on many factors, including the type and state of the cellulose initially acted upon.

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Aside from the management of geriatric disorders in a progressively aging population, Cellase 1000 can find uses in the correction of dyspepsia, flatulence, certain nutritional insufficiencies, and other GI disturbances of highly contemporary importance. Because Cellase 1000 facilitates the digestion of cabbage, cucumbers, and other "difficult" vegetables, its use for people who have trouble with these foods will allow greater cellulose bulk intake and a concomitant decrease in calorific starches. The implications for the regulation of obesity are plain.

A Pharmaceutically Elegant Enzyme

The whitish color and minimal odor of Cellase 1000 insure its palatability and acceptability in your products, while its high potency and low bulk allow you to formulate smaller and more attractive capsules and tablets than have heretofore been possible. Cellase 1000 is eminently suitable for combination with Mylase® 100 and Prolase® 300, Wallerstein's purified amylase and protease. Further, Cellase 1000 is compatible with most active ingredients. adjuvants and vehicles normally employed in digestive aids and nutritional supplements.

Get in touch with Gerry Gray for samples and your copy of Data Sheet 630 on Cellase 1000.

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Oil, Paint and Drug Reporter

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WASHINGTON EDITOR: Ralph L. Cherry, 956 National Press Building, Washington 4, D.C.
EUROPEAN EDITOR: Clare M. Cotton, 26A Wellington Road, London NW 8, England
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PRESIDENT: William S. Auchincloss
VICE-PRESIDENT: Jean Schnell Auchincloss
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A LOOK AT THE FIGURES

Chemicals Production: How It's Going

		July 1960	July 1959
Acetic Acid, Synthetic	lbs.	69,039,338	56,346,438
Acetone	lbs.	62,442,804	63,756,815
Ammonia, Anhydrous	tons	382,292	366,691
Benzene	gals.	34,535,135	20,691,726
Chlorine	tons	383,403	358,784
Formaldehyde (37% basis)	lbs.	110,367,043	126,514,867
Methanol, Synthetic	lbs.	167,992,318	147,841,723
Phthalic Anhydride	lbs.	30,612,206	32,730,758
Sodium Hydroxide (Caustic Soda 100% NaOH)	tons	406,473	394,707
Sulfuric Acid (100% H_2SO_4)	tons	1,336,027	1,375,154

Sources: Tariff Commission, Bureau of Census

Science in Advertising

"Science in Advertising" is to be "explored" by "five distinguished panelists" at the meeting of the Association of Consulting Chemists and Chemical Engineers in New York, October 25. The subject will also be opened for discussion by journalists, science writers, and others, as well as members of the association, who, says the announcement, "as consultants, devise many of the tests used or misused in advertising."

The distinguished panelists are not practitioners in the field of chemical or other physical science. One of them is the chairman of the Federal Trade Commission. Another is president of the National Better Business Bureau. One is editorial director of an advertising journal; another is editor of a basically publicity journal. The other is an executive of an advertising agency. Each is scheduled to discuss "the role of science—specifically scientific tests or independent laboratory tests and their impact on advertising" from the standpoint of his "occupational relationship," specifically "how they are used in stressing public, scientific and advertising interests." Specific interpretation of those terms is what you make it.

The announcement says that the symposium should prove to be a stimulating and highly informative one. It is very easy to agree with that expectation—especially in the light of a declaration about a fortnight ago by an FTC executive that that agency "is taking to the field to educate businessmen on advertising abuses" by reason of a belief that "the consumer has become impatient with false or dubious advertising."

In the preparation of consumer advertising, there is some measure of a role for physical science; consumers can be impressed by means of its thoughful application, with results that are mutually beneficial. But, the essential scientific factors in that practice are sociologic and psychologic. Advertising is a practice in human relations, which are an area of social science. It will be stimulating and highly informative to learn what the science panelists have to say in that direction.

AMA Hits at Health Costs

October 2 to 8 was National Pharmacy Week. Available information presents good evidence that the pharmaceutical industry and the drug trade at large contributed quite extensively and earnestly to programs of public "recognition of the pharmacist as a member of the professional health team." The week's observance at the local level in the demonstration of that status is reported to have been most encouraging to the American Pharmaceutical Association, which sponsored the event and provided pharmacists with the special public-relations kit commented upon here two weeks ago.

It would be usefully informative in several respects to know to what extent the industry and trade were influenced with respect of last week's public relations activities by the announcement one day in advance by the American Medical Association that it had "launched a drive to help the public cut health-care costs, with a comprehensive study and action program to guide the consumer in spending his health dollar wisely, arming him with facts in the hope that he will use them to get the highest quality of health care at the lowest cost." There can be all sorts of differences between "spending his health dollar wisely" and getting "the highest quality of health care at the lowest cost."

The pharmaceutical industry, the drug trade and the pharmacal profession must get adequately acquainted with every detail of the AMA plan with no delay, and prepare fully to meet what it will demand of them in objectives and procedures in public relations. Some idea of what they are going to be up against can—and should—be got from this publicly quoted statement of an AMA spokesman:

"Physicians are being asked to tell their patients the truth about vitamins, rheumatism and arthritis remedies, and other products being bought by the public and which are essentially worthless in terms of preserving and relieving pain. Physicians owe it to their patients to discourage them from throwing their money out the window on such methods."

Physicians are professionally obliged to be primarily and exclusively concerned with providing health care. They know that they have no cure for rheumatism or arthritis and can endeavor to provide their patients with means of relief from the pains of those afflictions. Whether they can do better in that respect than is possible with drugs that are available without prescription is largely—almost wholly—a matter of individual capability and what has been learned from the literature of drug manufacturers. Including the prescriber's fee, such health care must cost more than that obtainable in the open market, unless the seeking for relief is by way of the costly apparatus of physiotherapy. In many, if not most, health-care needs, going to a physician is the wiser investment of the health dollar—but it certainly is not the way of the lowest cost.

Management Must Know

Because of the responsibilities of employers in respect of the health of their employees, which are a part of basic humanitarian relationships—plus the obligations laid upon them by the terms of fringe and other special benefits in labor-relations contracts — industrial hygiene has become a most demanding topic in managerial know-how. For that reason alone—there are others—there will be very much for industrial management to learn—as a matter of necessity as well as of duty—at the twenty-fifth meeting of the Industrial Hygiene Foundation which will be held at Mellon Institute in Pittsburgh, October 26 and 27.

The first day of that meeting will be devoted to a management conference, in which the major topics of discussion will be group insurance (one contribution there will be on "Let's Stop the Misuse of Medical Money"), food additives legislation, and standards for air quality.

On the second day, there will be a medico-legal conference, a medical conference, a legal conference, an engineering conference, and a chemical-toxicological conference. Their agenda comprise a wide variety of essentially informative subjects, including "Problems Presented to Members of Departments of Industrial Relations in the Handling of Workmen's Compensation Claims," "Methods of Measuring Work Capabilities of the Individual," "Legal Considerations Involved in Developing Precautionary Labels," and "Chemical Antidotes for Radiation Injury." There is an urgent need for adequate managerial knowledge in all of those and all the other areas covered by the conference programs.

Those who desire to attend the meeting—and that would wisely be everyone who can—should so inform the Industrial Hygiene Foundation, 4400 Fifth Avenue, Pittsburgh 13, Pa.

Washington Talks It Over

Sulphur Institute Hangs Out a Brand New Shingle as Chemical Industry's Latest Organization, All Set to Start Functioning for Its Members on an International Scale.

By Ralph L. Cherry
Washington Editor

It's now official! The Sulphur Institute, newest of the chemical industry's trade organizations set up to further the interests of a particular producer group, has its shingle out and is announcing to the world that it is open and in business.

President Russell Coleman and Mrs. Coleman launched the institute on its career with an open house a few days ago to introduce official Washington to its spanking new offices, which will serve as its main headquarters. Over 100 officials from government and industry and other invited guests helped celebrate the occasion.

To say that the opening was of worldwide interest is not simply being euphonious. The institute is, in fact, international in character. Of its thirty-two members, twenty-four are companies with foreign addresses. Membership is open to all producers of sulfur and pyrites as well as other organizations interested in furthering the objectives of the institute.

The official brochure lists three principal objectives:

- The conduct, stimulate and support research work aimed at discovering new uses and expanding markets for sulfur and sulfur products.
- To interpret and publicize research findings and to serve as a central source of technical and other information relating to sulfur use.
- To collaborate in developing a concerted program for disseminating research findings and encouraging their acceptance by industry and agriculture throughout the world.

The institute is losing no time in getting into action. It is joining with IBEC, a Rockefeller Foundation-supported research organization, to do more study work on nutritional needs of crops in Brazil. Earlier studies by IBEC disclosed sulfur to be a limiting factor in Brazilian agriculture. The institute aims to pinpoint these needs more closely.

Also, the institute is advancing $17,500 towards the $350,000 estimated first-year expenses of the "Freedom From Hunger" program of the UN Food & Agriculture Organization.

All of the specialist staff members have now been appointed except the director of information.

Agricultural research will be under the direction of Samuel Tisdale, who is leaving soon on a world tour to discuss various research programs abroad; Moyle Williams is director of economic research, and Marion Barnes, formerly of Monsanto Chemical Company, heads up the industrial research work. The London office is being handled by Rene Le Clercq, formerly with Union Chemique Belge.

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Most times, a customer will prefer the *Medium.* It is somewhat more stable than the *Fine.* The average particle contains ten million microdroplets of vitamin A palmitate. At 30 to 60 mesh, the particles are still so small that they are excellent for tablets and two-piece capsules.

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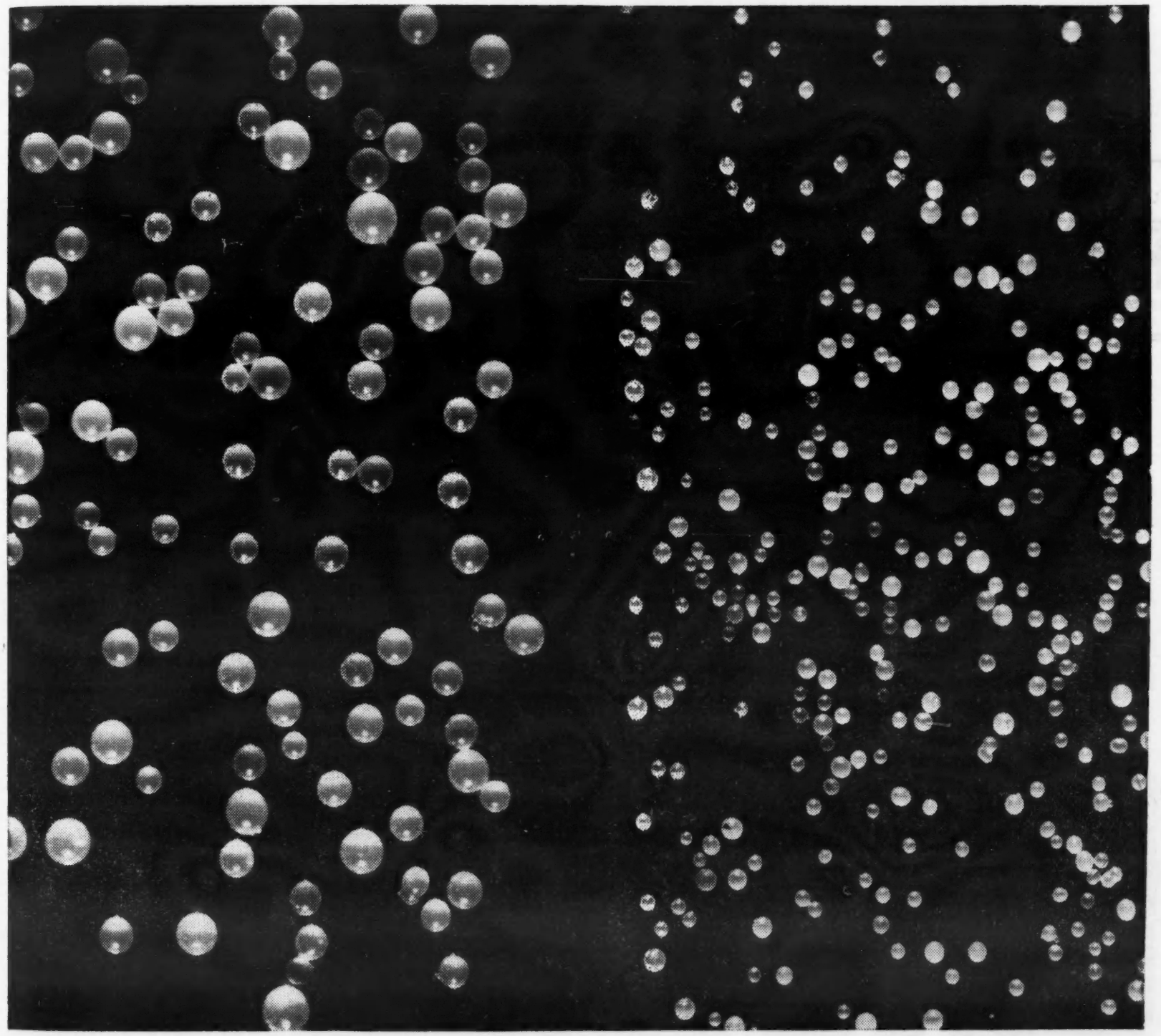

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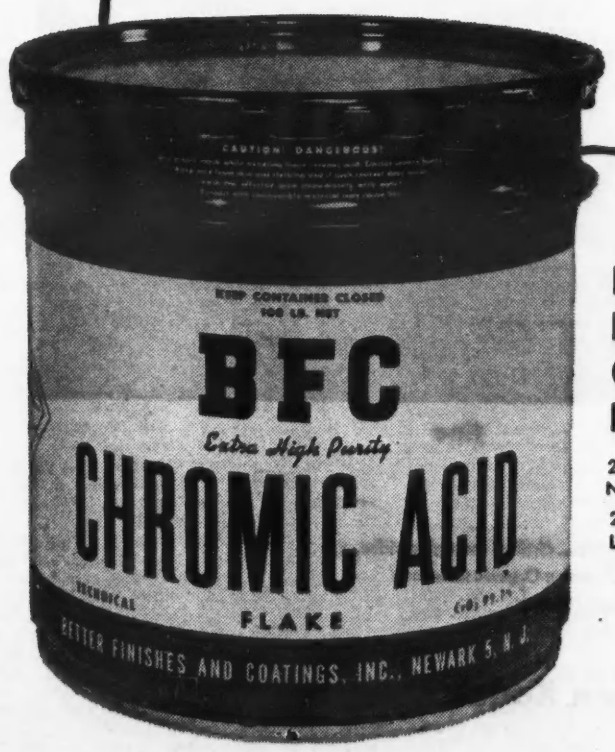

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Heavy Chemicals

Strikes in non-ferrous metals stole the market spotlight last week as five zinc mines in Wisconsin and Illinois got hit and a walkout of 7,000 miners paralyzed copper operations in Chile. Well, this may hurt the producers affected but it won't hurt the market, said one observer. Worldwide copper production, he noted, has been running a brisk 10 percent ahead of demand, carrying a continuing increment in stocks that could break through the rafters and trigger a price disaster. Even as these words were spoken, custom smelters shaved 2 cents off their prices. But primary producers, with an eye on the Chilean strike and on the production cutbacks reported from Rhodesia, elected to stand pat.

The wolf at the door of the acid and alkali market these days is not named recession or rolling readjustment. Looking over September sales figures, studying current inquiry, producers have decided that business is already good enough and getting better. But costs of production have increased while prices of chemicals have remained about steady, meaning thinner profits. This, say observers, is the chemical industry's chief problem today.

From Bureau of Mines comes word that production of primary aluminum in July totaled 177,564 short tons, the largest to date for 1960. It represented an increase of 4 percent as compared with June, 1959, when the industry produced 179,194 tons, Mines reports.

Operation of the aluminum industry in July ran at about 85 percent of capacity, the agency goes on to report. Output through July was tallied at 1,184,915 tons, 5.6 percent more than in the corresponding period of last year.

Shipments of the light metal, however, reached only 143,948 tons, the lowest since February, 1959. Thus the month closed with stocks at 203,626 tons, the highest on record.

The American Paper and Pulp Association reported production for the week ended Oct. 1, at 95.3 percent of theoretical capacity, as compared with the revised figure of 93.6 percent for the previous week and 97.4 percent for the corresponding week of last year.

Price Trends

Advanced
Cadmium metal, 10c. per lb.

Reduced
Tin metal, Straits, 1c. per lb.
Salts, ½c.-⅝c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Oct. 9, 1959
106.86	106.86	106.81	103.56

For Current Prices see page 9

Acids

Boric—Brisk sales in drug and some chemical outlets are more than offsetting the late start in industrial lines, sources in the trade report. Supplies are amply available and prices unchanged at the higher levels that went into effect a year ago June.

Hydrochloric—Food processing and oil treating outlets are running at full tilt, and chemical processors have gradually increased consumption since October 1, particularly for chlorinated solvents. On balance, the steel lag appears to be wielding only minor influence in this market.

Supply remains in approximate balance, with the customary lots of byproduct muriatic adding a tilt toward the long side.

Nitric—Fertilizer business has started out well enough to promise a brisk season, sources in the trade report. Meanwhile, producers whose business is confined to industrial accounts are not happy about the crippled steel picture.

Hydrofluoric — Paced by aluminum, metal treating accounts have kept this market busy through most of the year, according to reports from the trade.

Sulfuric—American Iron & Steel Institute estimates last week's steel output at 1,500,000 net tons or 52.6 percent of capacity, which would be a slight decline from the previous week's actual total of 1,558,000 net tons, or 54.7 percent of capacity. A month ago, however, output was running lower, totaling 1,401,000 tons during the comparable week.

Steel production a year ago, the Institute recalls, totaled 362,000 tons as the marathon strike continued.

Bases and Salts

Aluminum Sulfate—Prices remain as previously, steady at list everywhere except in the one competitive area already noted.

Well-sustained demand from paper makers has kept the market in good tone all year, notably during the summer, which was a tough one for many chemicals.

Caustic Soda—Producers find nothing to complain about in the demand level, and their confidence in the future is proved by the spate of caustic-chlorine expansions currently under way or in preparation.

But these very expansions serve to point up the market's one real problem: Competition. Observers point out that when one inflationary year passes another without a price increase in a given material, the net effect is exactly the same as though a price cut had been made against a stable currency.

To put it another way, prices must, paradoxically, move upward in order to remain stable in times such as these. In this sense, competitive price cutting can be said to exist in much of the alkali market, according to one observer's analysis. To avoid confusion, he hastens to point out that quotations have not been cut in any literal sense.

Chlorine—The foregoing remarks are not applicable here for the reason that chlorine makers were able to arrest profit erosion by putting across a substantial price rise at the start of the second quarter. They were able to do so owing to a strong market position for chlorine that no other big volume alkali could duplicate.

Magnesium Chloride—Just for the record, price advances of $5 to $12 a ton went into effect for the hydrous grade on October 1.

Potassium Bromate—One final mention of the fact that prices advanced 3½c. across the board on October 1.

Sodium Sulfate—Contract prices for anhydrous grade will rise $2 a ton on November 1. The advance, reflecting a broad range of cost increases, is already effective on spot.

Soda Ash—Why should a producer of natural soda ash turn thumbs down on a price advance initiated by a maker of the synthetic material? The question, not entirely an academic one, is answered this way by one astute observer of the market:

When costs are stable, the synthetic producer has all the advantages. His labor and power costs are constant, while process improvements and increased efficiency either widen his profit margin or permit him to cut prices in a competitive move against the natural producer.

On the other hand, when costs are on the rise, the natural producer is in the driver's seat. He has already paid for his soda ash, so to speak. While his competition is struggling with rising costs of processing materials, labor and power, he simply digs the material out of his own backyard, as it were. He holds the price line with no cost to profit margins, trusting that in time, his competitors, seeing the operation become less and less profitable, will decide that the game is not worth the cookie.

Nonferrous Metals

Aluminum — Receipts and consumption of purchased aluminum-base scrap in May continued the downward trend begun in April, the Mines Bureau reports. Receipts dropped 3,900 tons and consumption 3,700 tons, the Bureau notes.

Declining scrap intake was reflected by decreases in both production and shipments of finished ingot; 1,400 tons and 1,200 tons respectively. Smelter ingot stock during May increased 900 tons.

Secondary smelters used 27,861 tons of purchased aluminum-base scrap or 81 percent of the May total. Primary producers took 3,886 tons or 11 percent; and foundries, fabricators and others used 2,536 tons or 8 percent. The calculated metallic recovery totaled 27,967 tons: 22,581 tons from new scrap and 5,386 from old.

The Bureau estimates that full coverage of the industry would have shown a total

Heavy Chemicals

scrap consumption of 40,000 tons and secondary ingot output of 26,000 tons. Metallic recovery on that basis would have totaled 33,000 tons.

Cadmium—Prices have been advanced 10 cents a pound across the board, pegging ton lots at $1.60, the usual discounts prevailing for larger shipments.

Copper—Crude primary production in August totaled 84,571 tons, down from 91,571 the previous month, the Copper Institute reports. While secondary output also declined—to 13,613 from 10,822 tons—refined production scored a sharp advance to 157,382 tons from July's 132,697.

Deliveries to fabricators amounted to 105,417 tons, up significantly from 83,788 the previous month. These shipments averaged 3,401 tons per calendar day as compared with 2,703 in July.

World crude primary production was at 294,065 tons, almost unchanged from July's 294,052. Refined output totaled 330,365 tons, up from 299,427 in July.

Mercury—Business continued slow and there were reports that some lots of material were being shaded below the going rate of $209 to $212 for large lots, prompt shipment.

Silver—Price has been unchanged for well over a year at 91⅜c. a troy ounce, spot.

Tin—In slow market, tin declined 1c. a pound to $1.03, spot, Friday.

Zinc—Consumption of slab zinc in the US in July declined to 53,300 short tons, down 26 percent from June, the Mines Bureau reports. Slab zinc used in galvanizing steel products declined 22 percent to 24,700 tons. Usage in brass products sank to 4,600 tons, the lowest for any month since July 1949. Alloy manufacturers and die casters consumed 18,900 tons, a 26 percent decline from June, Mines notes.

Lead—Production and sales declined in July, but imports advanced, the Mines Bureau reports.

Output was 10,000 tons lower at primary and secondary plants together. Receipts and consumption of lead-base scrap at secondary lead smelters decreased 19 and 22 percent, respectively from June.

Cal. Standard Is Ready

—Continued from page 4

fineries at the Isle of Grain in Kent, England, and at Dinslaken, West Germany.

Initially, output from the two units will total 19,000 tons a year of orthoxylene, 16,000 tons of ethylbenzene and 22,000 tons of paraxylene. Startup time is slated for late 1961.

Under the corporate revamping, Oronite Chemical Company becomes the Oronite division of California Chemical. As California Standard's industrial chemical organization, Oronite is reportedly the world's largest producer of xylene isomers, detergent alkylate and isophthalic acid.

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The division will continue headed by T. G. Hughes, an officer of Oronite since its formation in 1941 and its president for the past ten years.

Neither personnel nor lines of communication with Oronite customers will be affected by the reorganization, a spokesman for the company stresses. He adds that Oronite will continue to market its complete product line of industrial chemicals and chemical intermediates.

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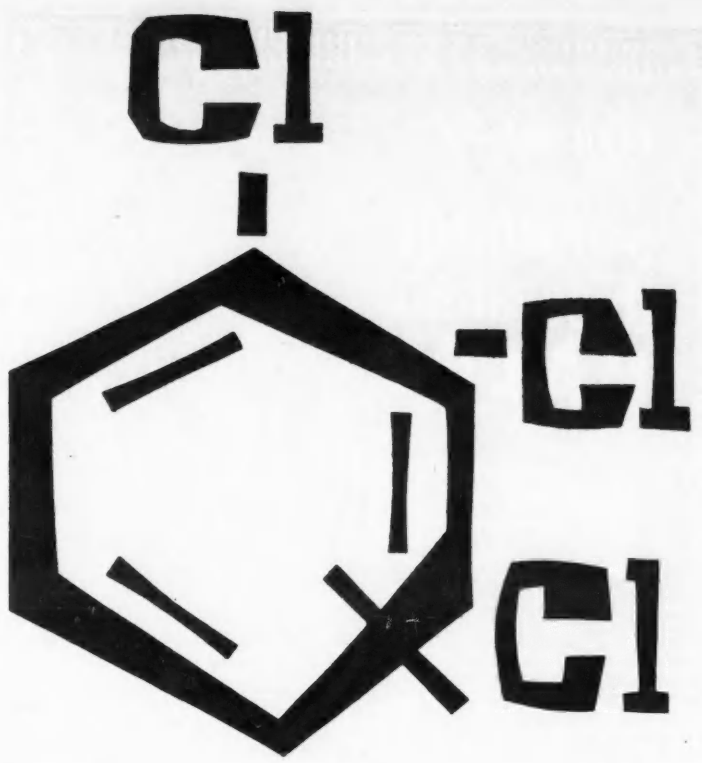

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Vick Chemical's President Sees Stepped-Up Expansion

Vick Chemical Company's capital expenditures this year will be the highest in the company's fifty-five year history. This, says Vick president Smith Richardson, jr., is one foundation for the company's future growth.

In an address before the Cleveland (Ohio) Society of Security Analysts last week, Mr. Richardson also cited the company's broad diversification in ethical drugs, proprietary drugs, veterinary drugs and plastics.

As factors contributing to the company's doubling of earnings in the last five years, the Vick executive also noted its active program of company acquisitions; ample capital for continued expansion; research and developments; international expansion, and management.

Net earnings over the five-year period, he said, have increased at an average annual rate of 17 percent. In the fiscal year ended June 30, he said, they increased 18.3 percent over the previous year.

F. P. Jay Chemicals Is New Name of Portz Company

F. P. Jay Chemicals, Inc., is the new name of Fred Portz & Son, Waukesha, Wis., chemical distributors. The company has a privately-labeled line of industrial and laboratory chemicals and maintains stocks of chemicals from leading suppliers. Company policy will not be affected by the change in corporate name, says Fred Portz, jr., who is continuing as president.

Pyrethrum Industry in Congo

—*Continued from page 5*

recommendations for the United Nations, which now plays a key technical role in Congolese industry:

- To send, or assist in obtaining, properly trained personnel, where needed, in the pyrethrum industry.
- To intercede in an advisory capacity with the Congolese government so as to assure the continuation and growth of the pyrethrum industry.
- In the event the need arises, to assist the banks in fulfilling their financing arrangements and guarantees to the planters.

Recommended UN Support

It was also recommended that the UN support the cooperatives and other pyrethrum associations already functioning in East Africa.

While in Kivu province, Biddle Sawyer's chief worked out a program with the local planters to expand native production. With worldwide demand for pyrethrum accelerating, however, Mr. Chavkin believes that for some years to come, regardless of increases in output, the demand will exceed available supplies.

Even in the heyday of synthetic insecticides, pyrethrum's non-toxicity to warm-blooded animals and its unique property of instantaneously paralyzing insects serve to keep the demand curve moving upward. Today, as insect resistance to synthetics becomes a matter of serious concern, Mr. Chavkin expects the natural product to play an increasingly crucial role in the pesticide business.

Monsanto Plastics Bid

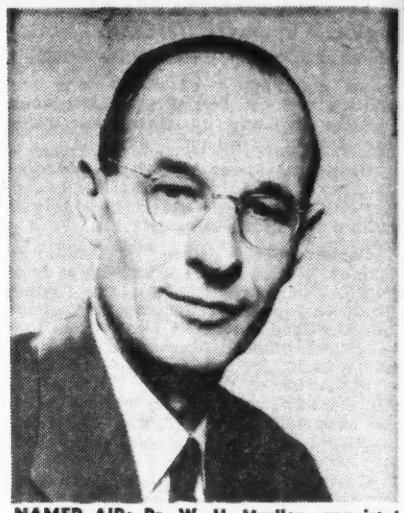
—*Continued from page 3*

santo's domestic production of styrene molding and extrusion materials will have increased 25 percent.

Interest in the midwest plastics markets focuses on the rapid growth of the custom molding, automobile and appliance industries. The latter two are becoming increasingly important users of heat-resistant high-impact styrene.

The new plant will have integrated polymerization and compounding facilities. Colored materials will be made at the location for the first time, Monsanto adds.

Styrene monomer for the operation will be transported by barge from Monsanto's Texas City, Tex., monomer plant to the Ohio River site of the Addyston unit. A monomer expansion is currently under way at Texas City.



NAMED AID: Dr. W. H. Mueller, appointed assistant to the general manager of Shawinigan Chemicals, Ltd., at the head office in Montreal.

American Potash Elects

Directors of American Potash & Chemical Corporation, Los Angeles, have elected Peter Colefax chairman of the board. He will continue in his post as president.

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ACC&CE Names Panelists For 'Science in Advertising'

"The Role of Science in Advertising" will be explored by five distinguished panelists from government, advertising and publishing at the open dinner meeting of the Association of Consulting Chemists & Chemical Engineers, slated for October 25 in the Shelburne hotel, New York.

Panelists are Earl W. Kintner, chairman of the Federal Trade Commission; Kenneth B. Willson, president of National Better Business Bureau, Inc.; Frank White, vice-chairman of McCann-Erickson, Inc.; S. R. Bernstein, editorial director of ADVERTISING AGE, and Cameron Day, managing editor of PRINTERS' INK.

Dr. Erwin Di Cyan, past president of the association, will be moderator.

Reservations are available at $12.50 per person, including dinner, from the association at 50 East 41st Street, New York.

Plastics Exposition Chief Expecting 30,000 to Attend

Some 225 exhibitors have already taken floor space at New York's Coliseum for what is expected to be the largest plastics show in the industry's history. The ninth annual National Plastics Exposition is slated for June 5-9, 1961.

Robert F. Elder, chairman of the exposition committee and president of Plax Corporation, expects a total gate of about 30,000, including representatives of industry, business, retailing and government.

Candidates Told to Talk

—Continued from page 3

ful not to take sides, the importance of voting in the election is being impressed upon the workers. At one time or another, almost every company publication or house organ circulated among the workers and stockholders has urged the readers to be sure to register and vote in the elections.

Some also have carried statements from the leaders of each political party stressing the importance of this constitutional right.

The political platforms of the two parties are not too far apart as to objectives; where they differ largely is in the approach or methods, and this mostly with respect to health care for the aged, labor relations and federal aid to education.

Agreement on Trade Agreements

Both platforms endorse continuance of the trade agreements program, with the Democratic platform favoring federal financial aid to industries and communities that have been hit by increased foreign competition. The Republican platform, on the other hand, advocates effective administration of the "escape clause" and peril-point provisions to safeguard jobs and domestic industries against serious injury.

Of particular interest to the chemical industry, is the statement in the Republican platform emphasizing the "selective" reduction of unjustifiable barriers to trade —a policy long urged by the chemical industry

On taxes, the Democratic platform would close loopholes "by which certain privileged groups legally escape their fair share of taxation" such as "depletion allowances which are inequitable, special consideration for recipients of dividend income, and deductions for extravagant business expenses which have reached scandalous proportions."

The Republicans call for a "broadly based tax reform to foster job-making and growth-making investment for modernization and expansion, including realistic incentive depreciation schedules."

A Republican Promise

The Republicans also would spur the economy by "continued active enforcement of the antitrust laws, by protecting consumers and investors against the hazard and economic waste of fraudulent and criminal practices in the market place, and by keeping the federal government from unjustly competing with private enterprise upon which Americans mainly depend for their livelihood."

The Democratic platform is somewhat more precise. It pledges the party to "vigorous enforcement of the antitrust laws," and favors requiring corporations to file advance notice of mergers; favors permitting all firms to have access at reasonable rates to patented inventions resulting from government-financed research and development contracts; favors strengthening the Robinson-Patman act to protect small business against price discrimination, and favors authorizing the Federal Trade Commission to obtain temporary injunctions during the pendency of administrative proceedings.

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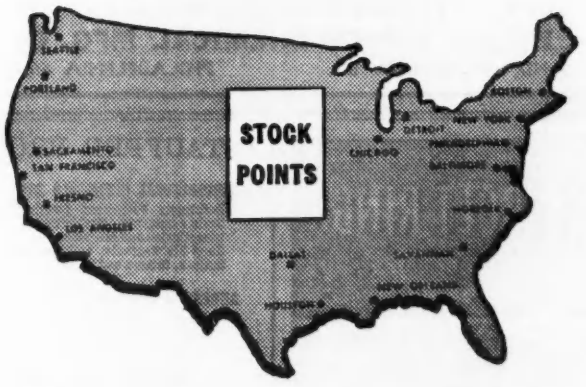

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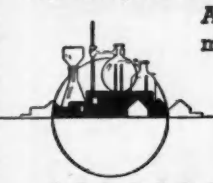

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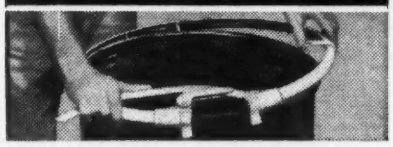
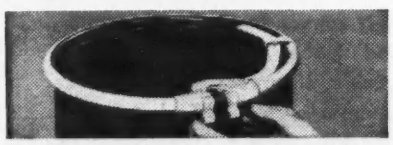
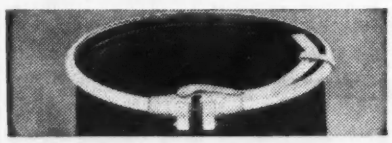


1. Apply ring to drum.



2. Clamp lever in place, insert bolt and apply nut.



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Chlor-Alkalies: An Analysis of Markets

—Continued from page 7

produce sufficient quantities by the fast disappearing lime soda method. This is a more costly process; therefore, users of caustic soda would not enjoy today's prices were it not for the chlorine capacity now available.

Likewise, expansion of soda ash production to the extent necessary would have required such vast sums of capital that it would not be economical to supply it at current price levels.

Geography plays an important part too. California's dry alkali lakes and the Wyoming deposits are far from major markets. With continually increasing freight rates and the need for more and more revenue by the railroads, this situation speaks for itself in consumer costs from distant sources of supply.

Ammonia soda plants can be built only where salt supplies are located not too distant from limestone. Of increasing importance in the location of such plants is the disposal of large quantities of waste chloride effluents.

Approximately 6 percent of the chlorine produced does not yield caustic soda as a co-product. Of this percentage, a small part gives caustic potash and the balance metallic sodium.

Only one operation produces chlorine without an alkali co-product—the nitrosyl process. Its capacity is still very small, and it is doubtful if it will ever prove as economical as the electrolytic cell process.

Where are these large tonnages of chlor-alkalies used? They are necessary in the manufacture of a wide variety of articles of commerce, in addition to hundreds of chemical compounds.

They are used for the treatment of water, sewage and general sanitation to protect public health; for producing textiles, paper and metals; for making soap, detergents and bleaches. Only a general classification of uses can be made.

Consumption by Industry Classification

SODA ASH		CAUSTIC SODA		CHLORINE	
Chemicals	35%	Chemicals	35%	Chemicals—Organic	55%
Glass	34%	Rayon & Cellulose	20%	Chemicals—Inorganic	13%
Nonferrous Metals	8%	Pulp & Paper	13%	Pulp & Paper	15%
Pulp & Paper	7%	Textiles	9%	Water & Sewage	4%
Cleansers	4%	Soap & Detergents	7%	Miscellaneous	13%
Water Softeners	2%	Petroleum Refining	6%		100%
Miscellaneous	10%	Miscellanous	5%		
	100%	Export	5%		
			100%		

The tables accompanying this article are quite revealing in tracing the growth of chlor-alkalies over the last four decades. Soda ash per capita consumption increased at a steady rate until World War II demands caused a greatly accelerated rise, but it has remained fairly level in trend since then.

This would suggest that domestic soda ash consumption will grow according to population increase. With existing capacity, it appears that there will be little need for new plant investment until perhaps the late Sixties, except for possible local geographical needs.

Caustic soda presents a different picture in per capita consumption, in that the rate of increase has been more uniform and still continues. The consumption trend is greater than population rate of increase.

Chlorine per capita consumption started from a very low base in the Twenties and has shown a very rapid increase, especially from the mid-Thirties on. The small increase the past four years may be significant in "guesstimating" per capita consumption in the Sixties.

Some major technological process changes have already taken place, and there are others on the horizon which could arrest the growth in consumption. Well known is the move to direct oxidation of ethylene, which replaced much of the chlorhydrin process, to produce the oxide, glycol and other derivatives.

Soda Ash

	US POPULATION	APPARENT ANNUAL DOMESTIC CONSUMPTION*	Pounds Per Capita
1920	106,466,000	1,149,100 tons	21.59
1921	108,541,000	942,072 tons	17.36
1922	110,055,000	1,317,774 tons	23.95
1923	111,950,000	1,693,475 tons	30.25
1924	114,113,000	1,792,554 tons	31.42
1925	115,832,000	1,891,634 tons	32.66
1926	117,399,000	1,954,520 tons	33.30
1927	119,038,000	2,017,407 tons	33.90
1928	120,501,000	2,330,316 tons	38.68
1929	121,875,000	2,643,224 tons	43.36
1930	123,188,000	2,445,500 tons	39.70
1931	124,149,000	2,247,777 tons	36.21
1932	124,949,000	2,268,174 tons	36.31
1933	125,690,000	2,288,570 tons	36.42
1934	126,485,000	2,356,641 tons	37.86
1935	127,362,000	2,465,354 tons	38.71
1936	128,181,000	2,733,776 tons	42.65
1937	128,961,000	2,982,706 tons	46.26
1938	129,969,000	2,479,004 tons	38.15
1939	131,028,000	2,880,673 tons	43.97
1940	132,122,000	3,098,491 tons	46.90
1941	133,402,000	3,641,025 tons	54.59
1942	134,860,000	3,860,257 tons	57.25
1943	136,739,000	4,426,952 tons	64.75
1944	138,397,000	4,648,060 tons	67.17
1945	139,928,000	4,504,666 tons	64.39
1946	141,389,000	4,432,501 tons	62.70
1947	144,126,000	4,694,616 tons	65.15
1948	146,631,000	4,665,867 tons	63.64
1949	149,188,000	4,043,712 tons	54.21
1950	151,683,000	4,372,582 tons	57.65
1951	154,360,000	5,331,122 tons	69.07
1952	157,028,000	4,658,013 tons	59.33
1953	159,636,000	5,137,824 tons	64.37
1954	162,417,000	5,049,167 tons	62.18
1955	165,270,000	5,444,559 tons	65.89
1956	168,176,000	5,412,751 tons	64.37
1957	171,196,000	5,161,778 tons	60.30
1958	174,064,000	4,846,590 tons	55.69
1959	177,103,000	5,459,387 tons	61.65

*Apparent annual domestic consumption means total production plus imports minus exports.

Synthetic glycerine is now made without chlorine. The government-sponsored metallic titanium program consumed substantial quantities of chlorine until it was halted. Perhaps in five to ten years the metallurgist will have found a way to use this unusual metal, and it will again be a chlorine user of some significance.

Pulp and paper companies are using more and more chlorine dioxide (generated from sodium chlorate), and therefore less chlorine per unit of output. Many organic chlorinations produce by-product muriatic acid, which offers a considerable disposal problem in certain areas.

Work on oxyhydrochlorination shows considerable promise, which would have a serious effect on chlorine usage. As an example, vinyl chloride monomer made from ethylene and chlorine as the only raw materials presents no by-product muriatic acid problem.

Direct oxidation of propylene is the goal of research efforts going on, and, again, chlorine consumption would suffer in a rapidly growing propylene derivative family of chemicals.

On the plus side, chlorine-consuming phosgene derivatives are showing promise. There is a great deal of research and development work in this area. Superior properties of titanium dioxide are claimed for that produced by the chlorination process over the historic sulfate method.

And Indicated Trends for the Future

Expansion of the chloride process could result in sizeable chlorine consumption.

Chlorinated organic additives contribute flame-resistant properties to plastics. This could be an important outlet in the predicted large volume use of plastics in the construction industry.

It is of interest to note the percentage growth in overall domestic consumption of chlor-alkalies and the average per capita consumption by decades.

Total Domestic Consumption by Decades

	SODA ASH		CAUSTIC SODA		CHLORINE	
		Increase		*Increase*		*Increase*
1920-1930	17,732,000 tons	*by Decade*	4,233,000 tons	*by Decade*	1,067,000 tons	*by Decade*
1930-1940	25,148,000 tons	42%	7,313,000 tons	73%	3,203,000 tons	200%
1940-1950	42,016,000 tons	67%	16,957,000 tons	132%	12,020,000 tons	275%
1950-1960	50,874,000 tons	21%	34,455,000 tons	104%	31,740,000 tons	164%

There is constant effort to reduce chlor-alkali production costs. With processes that have been in use for many years, it is increasingly difficult to keep pace with the important effects of increased labor, raw materials and investment capital needs for enlarged capacity or the replacement of existing equipment. However, progress must and will be made, but at a continually slower pace.

Have you had your chlor-alkalies today?

Average Annual Per Capita Consumption by Decades

	SODA ASH		CAUSTIC SODA		CHLORINE	
		Increase		*Increase*		*Increase*
1920-1930	30.6 lbs.	*by Decade*	7.3 lbs.	*by Decade*	1.8 lbs.	*by Decade*
1930-1940	39.6 lbs.	29%	11.5 lbs.	58%	5.0 lbs.	178%
1940-1950	60.1 lbs.	52%	24.1 lbs.	110%	17.1 lbs.	242%
1950-1960	60.2 lbs.	3%	41.7 lbs.	73%	38.4 lbs.	124%

Caustic Soda

	US POPULATION	APPARENT ANNUAL DOMESTIC CONSUMPTION*	*Pounds Per Capita*
1920	106,466,000	164,000 tons	3.14
1921	108,541,000	213,658 tons	3.94
1922	110,055,000	295,000 tons	5.38
1923	111,950,000	379,277 tons	6.78
1924	114,113,000	413,000 tons	7.24
1925	115,832,000	446,820 tons	7.71
1926	117,399,000	485,000 tons	8.26
1927	119,038,000	522,973 tons	9.29
1928	120,501,000	612,000 tons	10.16
1929	121,875,000	700,770 tons	11.50
1930	123,188,000	697,000 tons	11.32
1931	124,149,000	693,295 tons	11.17
1932	124,949,000	660,000 tons	10.56
1933	125,690,000	626,522 tons	9.97
1934	126,485,000	669,304 tons	10.75
1935	127,362,000	689,559 tons	10.83
1936	128,181,000	771,823 tons	12.04
1937	128,961,000	859,785 tons	13.33
1938	129,969,000	730,151 tons	11.24
1939	131,028,000	915,127 tons	13.97
1940	132,122,000	995,273 tons	15.07
1941	133,402,000	1,363,004 tons	19.53
1942	134,860,000	1,492,698 tons	22.13
1943	136,739,000	1,615,217 tons	23.62
1944	138,397,000	1,750,075 tons	25.29
1945	139,928,000	1,772,331 tons	25.33
1946	141,389,000	1,811,396 tons	25.62
1947	144,126,000	1,995,802 tons	27.71
1948	146,631,000	2,183,272 tons	29.78
1949	149,188,000	2,037,547 tons	27.32
1950	151,683,000	2,392,150 tons	31.54
1951	154,360,000	2,838,648 tons	36.78
1952	157,028,000	2,824,186 tons	35.97
1953	159,636,000	3,130,972 tons	39.23
1954	162,417,000	3,365,653 tons	41.45
1955	165,270,000	3,688,119 tons	44.63
1956	168,176,000	3,953,239 tons	47.01
1957	171,196,000	4,045,630 tons	47.26
1958	174,064,000	3,787,116 tons	43.51
1959	177,103,000	4,429,589 tons	50.02

*Apparent annual domestic consumption means total production plus imports minus exports.

Chlorine

	US POPULATION	APPARENT ANNUAL DOMESTIC CONSUMPTION*	*Pounds Per Capita*
1920	106,466,000	61,000 tons	1.15
1921	108,541,000	48,000 tons	0.88
1922	110,055,000	64,500 tons	1.17
1923	111,950,000	77,000 tons	1.38
1924	114,113,000	81,000 tons	1.42
1925	115,832,000	100,200 tons	1.73
1926	117,399,000	122,000 tons	2.08
1927	119,038,000	135,500 tons	2.28
1928	120,501,000	162,250 tons	2.69
1929	121,875,000	215,920 tons	3.54
1930	123,188,000	201,250 tons	3.27
1931	124,149,000	197,480 tons	3.18
1932	124,949,000	189,810 tons	3.04
1933	125,690,000	229,390 tons	3.65
1934	126,485,000	279,280 tons	4.49
1935	127,362,000	324,200 tons	5.09
1936	128,181,000	376,210 tons	5.87
1937	128,961,000	461,700 tons	7.16
1938	129,969,000	435,200 tons	6.70
1939	131,028,000	508,400 tons	7.76
1940	132,122,000	600,000 tons	9.08
1941	133,402,000	797,740 tons	11.96
1942	134,860,000	990,950 tons	14.70
1943	136,739,000	1,209,970 tons	17.70
1944	138,397,000	1,251,170 tons	18.08
1945	139,928,000	1,194,760 tons	17.08
1946	141,389,000	1,159,410 tons	16.40
1947	144,126,000	1,436,810 tons	19.94
1948	146,631,000	1,624,060 tons	22.15
1949	149,188,000	1,754,760 tons	23.52
1950	151,683,000	2,076,610 tons	27.38
1951	154,360,000	2,503,290 tons	32.43
1952	157,028,000	2,590,720 tons	33.00
1953	159,636,000	2,774,000 tons	34.75
1954	162,417,000	2,860,160 tons	35.22
1955	165,270,000	3,377,800 tons	40.88
1956	168,176,000	3,778,884 tons	44.94
1957	171,196,000	3,918,338 tons	45.78
1958	174,064,000	3,588,562 tons	41.23
1959	177,103,000	4,271,545 tons	48.24

*Apparent annual domestic consumption means total production plus imports minus exports.

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Agricultural Chemicals

The results of the General Services Administration's first invitations for DDT needed for ICA's 1960-61 anti-malaria program have been announced. Up for grabs was an estimated 11,824,800 pounds of 75 wettable DDT powder. Awards were made on bids that varied across the board. Lowest bid was 21 cents per pound while the highest accepted bid was 23.39 cents per pound. In addition, it was reported from trade sources that GSA has alerted the industry that it expects to issue invitations shortly for an additional 18 million pounds of 75 percent wetable DDT powder.

While actual totals of GSA needs for the 1960-61 anti-malaria program have not been announced, it is estimated that GSA will call for about 60 million pounds, or about the same amount needed last year.

The National Pest Control Association reports thte heptachlor has been registered for use as a soil poison in subterranean termite control by the Pesticide Regulations Section of the USDA. The Association urges the use of a 0.5 percent emulsion for most effective use.

Ammonium sulfate stocks are reported increasing despite the lower operating capacity of the steel mills. Producers hope that increased demand will result from the side-dressing applications on pastures and fields as well as from the winter wheat crop. Also counted on to boost demand are the mixed fertilizer formulators. Demand from that quarter is normally high at this time of the year.

West Coast ammonia prices continue at the old price of $66 per ton. Attempts had been made to raise the listing for anhydrous ammonia sold on the West Coast with the listings in effect on the East Coast. But as reported to OPD last week, several of the West Coast-based producers did not go along with the proposed increase. As a result, ammonia sold on the West Coast is $26 per ton cheaper than equivalent material selling on the East Coast.

The market for fishmeal and scrap continues to show signs of improvement as buyers' interest was generally increased. Quotations, however, remain unchanged. The possibility of price advances for fishmeal and scrap seemed likely to many in the trade. They base their estimate on the firmness in the Peruvian market and the number of domestic plants closing down for the season. All of this indicates to them that supplies of fishmeal and scrap will diminish over the next month, making buyers more susceptible to higher listings.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100–1949 average)

Last week	Prev. week	Last month	Oct. 9, 1959
111.26	111.26	110.10*	110.52

For Current Prices see page 9

Animal and Plant Foods

Ammonia—As of October 1, the price for anhydrous ammonia sold on both the West and East Coasts was to have been $92 per ton, according to previously announced schedules. Contacted by OPD last week, one major West Coast producer stated that they have decided to go along with the old listing of $66 per ton. This is the same price that was in effect before the aborted October 1 price change. Throughout the rest of the country, the $92 per ton listing is reported to be holding firmly.

Ammonium Sulfate—Despite the lower rate of output from steel's cokeovens, stocks of ammonium sulfate are reported to be increasing. Counted on to relieve the pressure of mounting stocks are: the manufactures of mixed fertilizers, side-dressing operations and winter wheat.

The mixed fertilizers formulators are expected to take their share of ammonium sulfate but as with many fertilizer users, the discounts offered on potash at this time manage to siphon off much of demand that would normally go to ammonium sulfate. In the case of winter wheat and side-dressing of fields and pastures much depends on the weather. For the past year, the weather throughout the nation has not been favorable to fertilizer men, indeed to almost all of the producers of agricultural chemicals.

Production of ammonium sulfate during August totaled 88,394,052 pounds, or 2.5 percent below the previous month, according to reports from the Bureau of Mines. Sales scored sizable gains for the month. August sales of ammonium sulfate hit 72,501,982 pounds, or 38.8 percent above the total for July.

Despite the increase in sales and the decreased production, stocks of ammonium sulfate at the end of August were estimated at 271,074,921 pounds, as against the 255,254,891 pounds on hand at the beginning of the month. The increase in the level of stocks is reported by the Bureau of Mines as 6.2 percent.

Animal Proteins—Market for fishmeal and scrap continued on the firm side although prices were unchanged. Fishmeal remains in the range of $90 to $92 per ton, bagged, on both Atlantic and Gulf coasts.

There is some talk in the trade of some advances in the quotations for fishmeal and scrap but buyers are reported to be holding the prices at the lower levels. The possibility of a price advance seems likely on the basis of reports that many plants are shutting down for the season. Some of the larger plants in the Gulf area, which represent a large percentage of total production have ceased operations. On the Atlantic coast plant operation continues, with only an occasional plant reported closing in New England area. The plants in the Gulf area are expected to complete production sometime at the end of October.

With early shipments of Peruvian meal reported to be firm and the reduction in the number of operating plants as the season reaches its end, most producers feel that balance of supply and demand will swing in producers' favor. They predict that prices for fishmeal and scrap will firm at higher listings in the next few weeks.

Pesticides

Congolese shipments of pyrethrum extract were returned to normal after operations had been halted due to the effects of independence recently granted the newly formed states of the Republic of Congo and Ruanda-Urandi. Ruandi-Urandi is one of three East African sources of the pyrethrum flower, while the Congo has the only existing plant for processing of the flower. To complicate matters further, there is a ban on the exports of the unprocessed pyrethrum flower from East Africa.

With the independence of the former Belgium provinces, the aftermath of suspicion between the states brought banking and planting operations to a halt. Ruanda-Urandi planters would not ship the flowers without assurances that the extract would be returned and that banking credits would be maintained.

With the cooperation of the United Nations, an agent for the sole sales representatives for pyrethrum in the US and Canada was sent to the Congo to make recommendations concerning the situation there.

He reported that agreements between the Congolese and Ruanda-Urandi governments were obtained guaranteeing the transit of the flowers to the processing plants and the necessary transfer of credits to the banks of the countries concerned.

At present, the world demand for pyrethrum exceeds the world's supply. It is estimated that the output of pyrethrum from the Congo will be about 1,790 tons in 1960-61. Production for the years 1959-60 was 822 tons. East Africa, on the other hand, has produced as much as 7,000 tons in one year.

DDT—The first of the General Services Administration's awards for its invitations for DDT have been announced. Invitations were issued for 10.9 million pounds of 75 percent wettable powder DDT about September 19. Bids varied across the board. The range of prices on the accepted bids included a low of 21 cents per pound and a high of 23.39 cents per pound.

Last week GSA announced that they expected to issue invitations for an additional 18 million pounds DDT, 75 percent wettable powder shortly.

Trade Name Chemicals & Specialties

Some industry sources estimate that sales of chemical delustrants to the textile industry may run as high as a quarter of a million dollars annually. However, use of these products has not shown substantial growth in recent years. Dye houses usually have a supply of delustrant on hand in case of emergency. If a batch of goods comes through a little brighter than expected, the delustrant is used to tone it down. Most high grade delustrants are titanium dioxide-based, some utilize a barium sulfate extender and inexpensive dullers make use of earths and clays, such as kaolin, in their formulation.

Compatibility with other finishing ingredients is a big consideration in the choice of a delustrant. Anionic and cationic products are available from most delustrant producers. The anionics are less expensive; the cationics are "permanent." Some claims of durability for anionics have also been made.

The value of chlorine bleaching compounds produced last year amounted to $113.1 million, a $10 million increase over the value recorded by the Census Bureau in the recession year of 1958. Industrially marketed products are generally utilized by the textile industry for treating natural as well as manmade fibers. These bleaches are aided by a number of other additives to the bleaching bath to improve the overall bleaching operation. Buffers keep the bleaching action of the bath constant and inhibit corrosion of stainless steel equipment from chlorine dioxide liquors, surface active agents assist in fiber penetration and sequestrants are used to reduce the concentration of metal ions in the bath. In some cases an additive may perform more than one function in a bleaching bath.

WHAT'S REPORTED ON HERE

Though coverage in the Trade Name Chemicals & Specialties market report encompasses twenty classes of chemicals, only a few of them are mentioned in this issue. Here's the entire list:

Adhesives, antibacterials and fungicides, antifoaming agents, antioxidants, antistatic agents, blowing agents, catalysts and accelerators, chelating agents, chemically processed oils, emulsions and latexes, enzymes, fatty acid derivatives, feed supplements, filtering materials, ion exchange resins, surfactants, synthetic waxes, textile chemicals, thickening and suspending agents, and ultraviolet absorbers.

If you have suggestions for any additional materials that might be included in this section write OIL, PAINT AND DRUG REPORTER'S Technical Editor, 30 Church street, New York 7.

Delustrants

Sales of delustrants to the textile industry may run as high as a quarter of a million dollars annually, according to some trade estimates, but tricot fabric and technology advances in the textile field have made inroads in the market. As a result dullers are more and more regarded as specialty chemicals. That's the feeling most industry sources convey when they talk about the chemical agents used to produce dull surfaces on synthetic fibers.

Tricot, a warp knit fabric, usually of rayon, is widely used in slips and undergarments and has curbed the use of delustrants. Then, too, modern textile making leaves less room for error. The mills know the type of finish they want and are able to turn it out with ever-increasing precision.

Still, if the market isn't exactly bursting with energy, it's not down and out either. As one report has it, "every dye house keeps a few drums of delustrant around for emergencies. A batch of goods may come up a little brighter than it should and the delustrant tones it down. In addition, use of delustrants in hosiery has been steady. Most women don't like a high sheen on their stockings."

The best delustrants have always been titanium dioxide-based because of higher covering power obtained through use of this compound. Some products make use of a barium sulfate extender and inexpensive dullers may utilize earths or various clays, such as kaolin, in their formulations.

Choice of a delustrant (cationic or anionic) will depend on its compatibility with other finishing agents. Anionics are less expensive and where compatibility is not all-important, economics take over. Also, some degree of durability, one of the big assets of cationics, has been claimed for anionics. Important requirements for a good delustrant are that they have good covering power and that they will not mark off on drying.

Cyanamid of Canada Ltd. markets "Dullatone" textile delustrants based largely on titanium dioxide. **"Dullatone CA"** is a cationic white pigment duller giving the added property of a soft hand. The material is reported to give high duller build-up with a durable finish. Also cationic, **"Dullatone DG,"** a dark pigment duller with properties similar to the "CA" formulation. Two anionic dullers, **"Dullatone 60"** and **"59,"** are made by the company, the former a white pigment duller with minimum softening action, and the latter a dark pigment duller used on dark shades and similar in properties to **"Dullatone 60."**

A white organic pigment made by the company is **"Xyno Resin AN 25,"** a vinyl copolymer resin duller primarily used for durable dulling effects on many synthetic fabrics. Use of this product depends on creating a discontinuous film which means that low temperature drying is required. If heated to excess, a smooth film forms.

"Dultex," made by Soluol Chemical Co., Natick, Rhode Island, is an anionic, the delustrant component of which is pure titanium dioxide. The material was designed for producing delustered and "chalky" finishes on rayon fabrics. While the product may sometimes be used alone, it is generally utilized in conjunction with **"Soluol,"** a softener and finishing oil, or together with **"Soluol"** and **"Soluwax,"** an emulsifiable finishing wax primarily designed for application in the finishing of synthetics.

Emkay Chemical Co. manufactures **"Emka Permadul"** cationic delustrants and anionic products under the tradename **"Rexodull." "Emka Permadul DS-2"** is a specially prepared permanent dulling agent for nylon piece goods and hosiery. The material is compatible with cationic finishes. **"Permadul O"** is an homogenized dispersion of titanium dioxide so treated that when applied to rayon and acetate fabrics in the quetsch, it produces a permanent dulling effect. As an anionic, **"Rexodull MA"** is a versatile dulling agent useful on both light and dark shades. It is compatible with waxes, gums and softeners. **"Rexodull XX"** is a blended formulation of titanium dioxides and lithopone pigments, while **"Rexodull DK"** is a formulation of dispersed pigments recommended as a dark shade duller.

Bleaching Agents

The production and sale of industrial chlorine-containing bleaching compounds has continued to show a modest increase over recent years. Bureau of Census reports that the value of chlorine bleaching compounds produced during 1959 was $113.1 million as against $103.1 million in the previous year and $98.0 million in 1957. In 1956, the value was $86.6 million and in 1955, $80.5 million.

Tradename sodium chlorite products are marketed as bleaches for industrial use in the textile field, especially on synthetics. Among the synthetic fibers, the compound is reported to be particularly effective in preventing yellowing in acrylic fibers. Sodium chlorite has also been found effective on polyamides, such as nylon.

Normally, the compound is stable and must be activated to achieve effective bleaching. End product of the activation reaction is chlorine dioxide which is produced by using agents which react with the sodium chlorite or using agents which cause its decomposition. The latter are called acid activators and operate in a pH range of 2.5 to 4. They include the common inorganic mineral acids or organic acids such as oxalic, formic or acetic. Acetic acid is an especially good activator because its buffering characteristics provide an easily controlled bleaching bath. Reducing activators are generally

—Continued on page 72

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Lower prices were posted early last week for dipentaerythritol and itaconic acid and esters. Dropped 6 cents, di-PE, a basic ingredient in special types of paints, is now quoted in carload or truckload quantities at 34 cents a pound in the east and middle west, and 35 cents a pound on the west coast. Production economies, resulting from lower operating costs at a new plant, and greater sales volume permitted the price reductions, according to a spokesman for the firm which initiated the action.

In a second price development last week, reductions ranging from 7 to 27 percent were announced for itaconic acid and esters. The carload price on technical itaconic acid became 34½ cents a pound, while the quote on the refined grade, also dropped 4 cents, went to 49½ cents a pound.

Cut more sharply, prices for dimethyl itaconate and dibutyl itaconate were dropped from 54 cents to 39½ cents a pound.

A company spokesman said the lower prices resulted from many new applications for the product, especially in the rapidly expanding polymer industry, and a continuing increase in sales. Cited were the Italian thermoplastic molding compounds.. "Dialux A" and "Dialux C," which are high styrene copolymers of dimethyl itaconate with physical properties resembling methyl methacrylate polymer.

Simultaneous with the price reductions, the firm announced that the assay of technical itaconic acid had been increased from 95 to 99 percent.

Prices for two large volume chemicals bear watching. Start-up of new facilities, expected next month, could lead ultimately to a price reduction for acrylonitrile. The multi-million dollar unit has an estimated capacity of 50 million pounds a year and is the first of two being built by the firm that has been to date the largest single merchant consumer of acrylo in textile fibers.

Butadiene prices, which went lower in midsummer, are now seen as ranging from 12¾ cents a pound to 13½ cents a pound. Due to the spread, further weekness is not unlikely, especially if there's an excess of "excuse me" stuff about, as the "on purpose" segment of the trade see it.

Output of crude and synthetic glycerine amounted to 25.9 million pounds in August, bringing the cumulative total for the first eight months of the year to 204.3 million pounds. This compares with 169 million pounds in the comparable period of 1959, the Commerce department reports.

Acetone — Exports of acetone hit a monthly high in August at 2,119,915 pounds. This compares with 8,056,943 pounds in all of 1959 and 7,658,490 pounds in all of 1958.

The big increase may be no more than a one-shot affair. This is indicated by the fact that the biggest quantity exported went to the Netherlands (1,139,620 pounds). In the two previous years, the Dutch didn't buy a pound.

Other buyers in August included Mexico, Columbia and Venezuela. The entire shipment was valued by the Commerce department at $141,094.

Butadiene—Intensely competitive is the way some trade sources describe today's butadiene market. This, of course, is more the rule than the exception.

Apparently, the struggle for business got particularly acute this summer for prices were reduced anywhere from 1c. to 1¾c. a pound. Replacing a tankcar delivered listing of 14½c. a pound at that time, was a range of 12¾c. to 13½c. The spread reflected the varying schedules posted by the several producers, and while it is still applicable to business booked today, it does not really reflect a more stable market.

Butadiene is sold almost exclusively on a contract basis." This means, a trade member explains, that a consumer when offered a lower price than he's been paying right along, can solicit his regular or other suppliers for the same or a still better price. Consequently, one maker's lower price is a constant challenge to others in the industry and can weaken the market in proportion to the supply available.

Suggested is that producers of by-product butadiene (from ethylene) can offer a cheaper product when they wish to sell off excess material. That they are, in fact, doing so today is purely speculative.

Although overcapacity still plagues the industry, production rose appreciably in 1959. According to Tariff Commission statistics, output of rubber grade butadiene last year amounted to 1,816,122,000 pounds while sales were 1,095,564,000 pounds, valued at $146,891,000 or 13.4c. a pound.

In 1958, production was 1,442,869,000 pounds while sales were 861,415,000 pounds, valued at $115,143,000 or 13.4c. a pound. (The way prices averaged out over the past two years is quite interesting, particularly in light of the current top-of-the-range quote of 13½c.)

Although use of SBR-rubber in the manufacture of passenger car tires was probably up in the early months of 1960, parallel to the increased sales of new model cars, the outlook for the remainder of the year is clouded. If the 1961 models don't find buyers, butadiene producers will get the word quickly.

The development of synthetic-natural rubber doesn't alarm some people in the industry. Not only is the process more complicated but this material, derived from isoprene, is higher priced than the SBR type. Additionally, it's expected that producers will go after the 20 percent of the market, mainly truck tires, that is still the province of natural rubber.

Butyl Acetate—Exports of butyl acetate, at 179,622 pounds in July, rose to 2,419,903 pounds in August. Valued at $330,077, this material went mainly to: Belgium 1,994,567 pounds at $267,011; Canada 233,036 at $33,047, and Cuba 64,600 pounds at $9,463.

Butyl alcohol exports in August were 5,694,966 pounds, valued at $690,388. Major buyers were: The Netherlands 1,411,413 pounds at $125,969; Belgium 1,815,715 pounds at $243,068; West Germany 1,072,602 pounds at $132,464; and Italy 782,342 pounds at $93,881.

Chlorinated Solvents — The chlorinated solvents are moving routinely, according to reports from several trade sources. This is somewhat disappointing, of course, because demand for these and other chemicals normally increases post Labor Day as customers rebuild inventories and prep for the traditionally bigger wintertime consumption.

On the eastern seaboard, domestic sup-

Price Trends

Advanced
None

Reduced
Dipentaerythritol, 6c. per lb.
Itaconic acid, refd., tech., 4c. per lb.

Comparative Price Indexes
(100 = 1949 average)

Last week	Prev. week	Last month	Oct. 9, 1959
131.10	131.20	132.09	130.47

For Current Prices See Page 9

Aliphatics Foreign Trade: August

Exports of selected industrial aliphatic organics for the months of July and August, 1960, as reported by the Bureau of Census, were as follows:

		August	*July*
Acetone	lbs.	2,119,915	732,355
Alcohols, including, glycols, n.e.c.	lbs.	13,825,534	12,319,400
Butyl acetate	lbs.	2,419,903	179,622
Butyl alcohol	lbs.	5,694,966	1,568,509
Ethyl alcohol	gals.	326,030	11,452
Ethylene glycol	lbs.	6,644,968	10,101,932
Formaldehyde, 40 percent solution	lbs.	1,975,510	263,848
Glycerine, crude and refined	lbs.	609,481	3,684,751
Methyl alcohol	gals.	1,483,338	2,364,844
Propyl alcohol	lbs.	3,897,992	312,611

pliers of perchlor and trichloroethylene still run into quite intense competition from foreign-source materials and this, perhaps, may be holding down their sales to some extent. Generally, however, the slower than normal pace of business looks like a case of customer reluctance to build stocks.

Dipentaerythritol — A reduction of six cents a pound in the price of dipentaerythritol, a basic ingredient in special types of paints, was announced last week by two major producers.

Effective October 4, the carload or truckload price became 34c. a pound in the east and middle west, and 35c. a pound on the west coast.

Permitting a price reduction, the firm initiating the action said, were economies obtained in manufacturing di-PE in greater volume at a new plant which was brought on stream about a year ago.

Stepped up production at the plant, reputed to be the most modern of its kind, assures the paint and chemical industry of a continuous source of supply of di-PE, a spokesman for the firm added.

A competitor went along with the price reductions for competitive reasons, of course.

There are no indications that PE prices, at 31c. a pound in carloads and 32c. a pound in lesser quantities, will be reduced similarly. The polyol fared especially well in 1959, mainly because of the increase in alkyd resins output, and except for July, production in '60 has been averaging out at 5.4 million pounds. This could indicate that another record year is in the making.

Glycerine—Although stocks of glycerine, at 47 million pounds, were higher on August 1 than the same date a year earlier (31.9 million), the statistical position was improved in two particulars. Both disappearance and exports were up.

Disappearance was 162.6 million pounds, exports 13.4 million during the first seven months of 1960. For the same period in 1959, disappearance was 148.8 million pounds and exports 11.3 million.

Imports, at 6.4 million pounds, were only slightly higher (6.0 million).

Causing the rise in stocks, production in the January-July period this year rose appreciably from the '59 level. However, the increased output was offset by the rise in exports and total availability was 209.5 million, versus 180.6 million pounds the year before.

Itaconic Acid — Price reductions ranging from 7 to 27 percent for itaconic acid and esters were announced last week by a leading chemicals producer. The move was long anticipated.

The carload price on technical itaconic acid was dropped from 38½c. a pound to 34½c., a 10 percent decrease, while the refined grade, reduced 7 percent, went from 53½c. to 49½c. a pound.

Cut even more sharply, prices for dimethyl itaconate and dibutyl itaconate were dropped from 54c. to 39½c. a pound, a 27 percent decrease.

Simultaneous with the price reductions, the firm announced that the assay of technical itaconic acid had been increased from 95 percent to 99 percent.

A spokesman for the firm said the lower prices resulted from many new applications for the product, especially in the rapidly expanding polymer industry, and a continuing increase in sales.

Polymer chemists, he noted, have obtained new results with itaconic acid because of its unique molecular structure. He cited the Italian thermoplastic molding compounds, Dialux A and Dialux C, high styrene copolymers of dimethyl itaconate with physical properties resembling poly (methyl methacrylate), and the polymeric coatings that use itaconic as a co-monomer to improve adhesion to selected substrates.

Itaconic acid's uniqueness among acidic monomers derives from its beta-carboxylic group, which is separated from the finished polymer chain by a methylene group. "This separation lessens steric hindrance of the carboxyl group by the polymer chain, thus allowing it to be more effective," it was concluded.

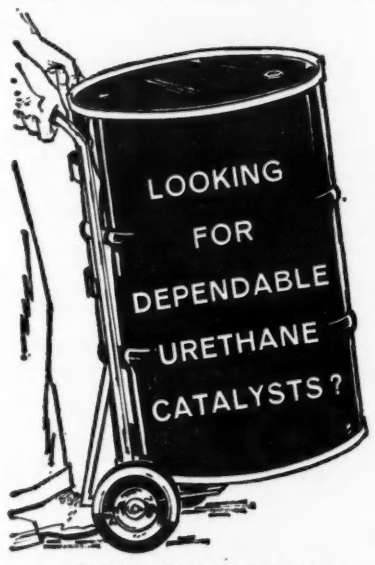
Although there is only the one domestic producer of itaconic acid currently, the outlook is for a second sometime in the not too distant future. Having the necessary fermentation facilities, a new manufacturer of citric acid has announced its intention to get into itaconic and, in fact, told OPD several weeks ago, that it was well into pilot work and very interested in the esters, for which a broadening market was foreseen.

Molasses—Markets for feeding cane molasses were mostly steady during the week ended October 4. Demand was generally slow to moderate in New Orleans and Mobile markets and moderate to good in other parts of the nation, according to Agricultural Marketing Service.

New Orleans prices were unchanged and centered more solidly on mostly 11.5c. a gallon.

Imports of industrial and feed molasses during July amounted to 50 million gallons, an increase of 9.7 million from June and 21.2 million higher than imports in July 1959. Cumulative total for the first seven months of '60 was 294.4 million gallons, about 15 million gallons more than was imported during all of '59. Principal sources of imports in July, in millions of gallons, were: Cuba 24.5; Mexico 13.5; Jamaica 6.5; French West Indies 2.0 and Barbados 1.5.

Exports of industrial and feed molasses from the US and its territories in July totaled 5.9 million gallons, compared to 2.7 million in June. This brought the cumulative figure for the first seven months of the year to 14.1 million gallons. Of this, 12.3 million gallons were shipped from Puerto Rico, the remainder from the US mainland.



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Coal Chemicals

With the recent round of price increases for intermediates completed, the market is settling down again. Few significant alterations are noted by the trade in supply/demand characteristics except in maleic acid and fumaric asid. In these two instances, particularly in maleic, supply is rapidly approaching the point where the shortage may be thought to be relieved. Fumaric is presently tight but is expected to soon follow maleic to a more balanced supply positon.

Supply of benzene, naphthalene and phthalic anhydride remains restricted by steel operating rate.

This aspect of the market offers producers and consumers little encouragement. Most observers had felt that steel would have made steps toward recovery with the advent of fall. However, the usual stimulus of new model auto production has thus far failed to ignite interest in steel buying. Car inventory remains at a high level causing caution and steel inventory in other large consuming industries remains at levels sufficient enough to warrant only immediate-need buying at best.

Naphthalene production is a source of concern both to maker and buyer but for different reasons. Buyers are urgent in their search for material and are buying at prices, from abroad at least, of 18 cents. The more imported naphthalene material used in production means higher cost which may have been reflected in the fourth quarter advance of so many intermediates. To makers of naphthalene a spectre is haunting the future—competition from petroleum to the tune of 275 million gallons annually—some of which will start to come on stream in the middle of next year.

The American Iron and Steel Institute estimated that steel production in the week ended October 25 would amount to 52.6 percent of theoretical capacity equivalent to 1,500,000 net tons of steel. Output in the week previous was 1,558,000 tons, 1,401,000 in the comparable week one month ago and 362,000 net tons in the corresponding week one year ago.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Oct. 9, 1959
118.29	118.28	118.28	118.47

For Current Prices see page 9

Basic Products

Benzene—Trade observers continue to report a tight supply situation for this basic chemical.

Despite optimistic claims made from some sectors it appears that relief will not be forthcoming in the last quarter.

As steel goes, so goes the cokeovens and so goes benzene. The only trouble is the steel mills aren't going anywhere. Estimates of production for last week were below the previous week's confirmed rate of 54.7 percent.

Statistics compiled through July show that benzene from cokeovens was up 9.1 percent over the same period last year. Petroleum supply rate was 38 percent ahead of last year while tar distillers were off 25 percent.

Cresylic Acid—Confirmation was received last week that ADF cresylic acid has been moving at less than the established price of $1 in tankcar quantities. Spokesmen were quick to point out, however, that prices were tailored to meet special requirements and particular competitive situations and that the scheduled price is still in effect.

Under duress it is reported bulk prices have slipped upon occasion to 95c. a gallon in bulk and 98c. in drums, 50 drums or more.

Reporting the current market, one trade source cites the import sector as presently quiet with business not as brisk as encountered in the first quarter.

Naphthalene—Tight supply remains the key characteristic of this basic material. That's the report from trade sources as cokeoven output continues to be restricted due to a steel operating rate once more in the low fifties.

Interesting enough to note is the fact that domestic production of naphthalene is stepping along at a pace 16 percent greater than in 1959 based on Tariff Commission statistics through July.

In the first seven months of this year 331 million pounds of naphthalene were turned out as compared with 277 million pounds in the same period last year.

Evidently this increased production is not enough to satisfy needs for consumers are urgent indeed in their calls for material.

Result is that world markets are being scoured for naphthalene and in general the only question being asked is not how much does it cost but how much of it can be purchased and when will it be available?

Thus the import field continues to display premium prices. One lot is known to have entered the US recently at 18c., a price which has been reported frequently throughout the year.

Another interesting note, as yet unconfirmed, concerns a supposed barter deal in which the rate of exchange would be three pounds of naphthalene, imported, for one pound of phthalic anhydride, exported.

Phenol—The two price system remains in effect with resin maker buying at a cent less than other consumers.

Phenol producers contacted last week were far from satisfied at having to maintain price quotations based on end-use but were adamant in their stand that they would remain competitive.

One trade source reported the supply position as a comfortable one with demand continuing at a good pace.

Phenol output in 1959 totaled 691,987,000 pounds according to Tariff Commission. Sales were placed at 414,264,000 pounds with a total value of $59,860,000 and a unit value of 14c.

Synthetic phenol outstripped natural at a rate of over 15 to 1.

Total synthetic phenol output: 651,982,000 pounds.

Total natural phenol output: 40,005,000 pounds.

Pyridine—Trade sources report that demand continues high with no easing of the tight supply situation.

Pyridine, crude bases, totaled 22,107 gallons in July according to the Tariff Commission, an increase of 5,405 gallons from June.

Pyridine, refined 2°, from cokeoven and tar distiller sources totaled 138,213 pounds

Cokeoven Output: August

The following statistics indicate production of selected coal chemicals as reported to he Bureau of Mines by cokeoven plant operators. Benzene statistics do not include motor benzol. All figures are reported in gallons.

	August 1960	*August* 1959	*First Eight Months* 1960	*First Eight Months* 1959
Benzene, nitration	6,987,727	1,731,400	75,863,878	65,373,900
Industrial pure	1,931,368	890,700	25,202,224	24,360,500
Industrial 90 and other	147,896	147,900	1,334,938	1,109,900
Coaltar, crude	48,121,635	19,712,100	508,347,057	419,232,600
Chemical oil, crude	1,885,339	575,000	20,603,213	15,326,800
Solvent naphtha, crude and refined	217,154	60,300	3,337,018	3,176,500
Toluene, nitration	1,952,631	551,900	18,058,789	16,259,800
Industrial pure	411,584	291,100	4,075,446	4,407,300
Xylene, all grades	811,054	245,500	5,881,567	5,689,000

Coal Chemicals

in July almost double June's figure with an increase of 135,380 pounds.

Dyes

Tariff Commission reports production of Vat green 1 (C.I. 59835) in July at 249,481 lbs. June's production was 200,729 pounds.

Direct black 38 (C.I. 30235) output in July totaled 410,000 pounds as compared with 517,602 pounds in June.

Azoic coupling component 2 (C.I. 37505) production in July was 27,796 pounds.

Intermediates

Dodecylbenzene—Demand in the last few weeks has been gratifying to producers according to one source. Reason for heavy calls was due in part to attempts by consumers to beat the October 1 price increase which saw a ½c. hike.

Prospects for the balance of the year appear to be good, too, with demand expected to continue at a good level with no unfavorable factors in view to upset the current situation.

Dodecylbenzene production in 1959 totaled 493,997,000 pounds according to Tariff Commission preliminary reports.

Sales were reported to be 447,722,000 pounds with a total value of $44,728,000 and a unit value of .10c.

Fumaric Acid—In short supply only recently this product appears to be following on the heels of maleic anhydride and is easing.

Reason is said to be in the slackening polyester demand which is the result of decreased boat sales. Boat dealers' inventories are said to be very high and with winter approaching recovery in sales is not expected.

One trade source last week offered the opinion that whatever snug supply position occupied by fumaric at present will be abandoned by the end of the month.

Maleic Anhydride—One trade source last week commented that the long shortage of MA appears to be easing with increasing rapidity. The shortage of MA itself may not be over, the source continued, but that a beginning to the end of it is occuring is a fair estimate.

Reason for the easement in supply is attributed to increased capacity.

Barely a month ago the world's largest producer came on stream with an additional 20 million pound unit. Another large producer reports that technical problems, involving dehydration, have been licked at its plant and that material in good volume is reaching consumers.

Malic Acid—Extremely tight supply is reported for this product used in lacquers and foods. One producer indicates that he now has customers on an allocation basis.

Price remains at 50c. per pound in drums.

Monochlorobenzene — Tariff Commission figures for 1959 indicate total production was 562,070,000 pounds last year. Sales were computed at 88,858,000 pounds with a total value of $6,162,000 and a unit value of .07c.

Styrene Monomer—Reported production through July tallied by the Tariff Commission was running approximately 26 percent ahead of last year. During the first seven months of this year 1,015 million pounds of styrene were turned out as compared with 766 million pounds in the same period last year.

Projecting the rate of production through the balance of the year a total for 1960 of 1,740 million pounds is computed. Last year's total: 1,571 million pounds.

Trade sources report demand remains well sustained.

Supply of course is tied in with production of benzene, styrene's building block. One trade source comments that although benzene is tight, material is being found to produce styrene and cites the booming

—Continued on page 54

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven opertations during the week ended October 2, were as follows:

Ammonia liquor	lbs.	494,261
Ammonia sulfate	lbs.	19,946,556
Benzene	gals.	1,923,512
Coaltar	gals.	10,513,443
Crude chemical oil	gals	307,410
Solvent naphtha	gals.	61,482
Toluene	gals.	430,375
Xylene	gals.	122,964

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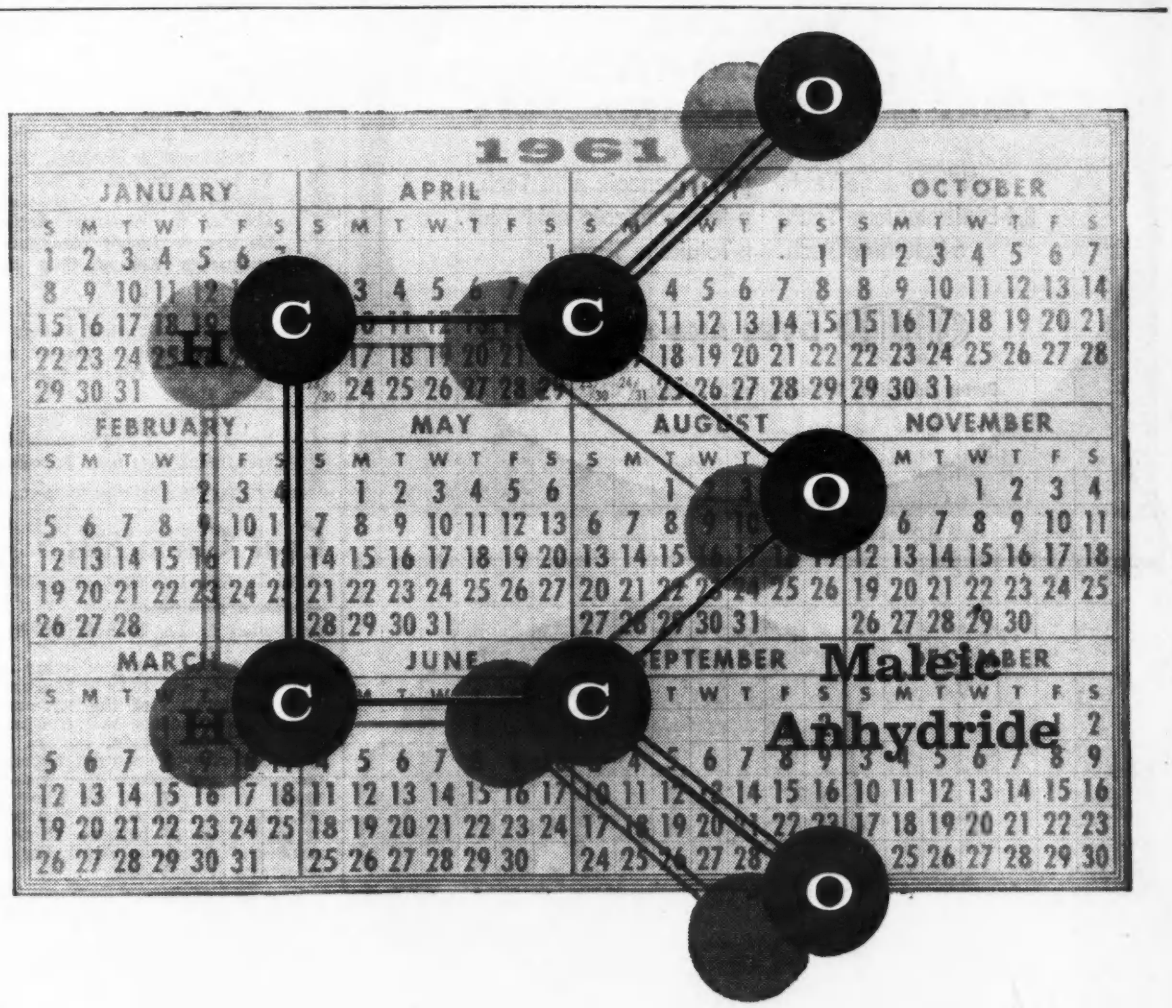

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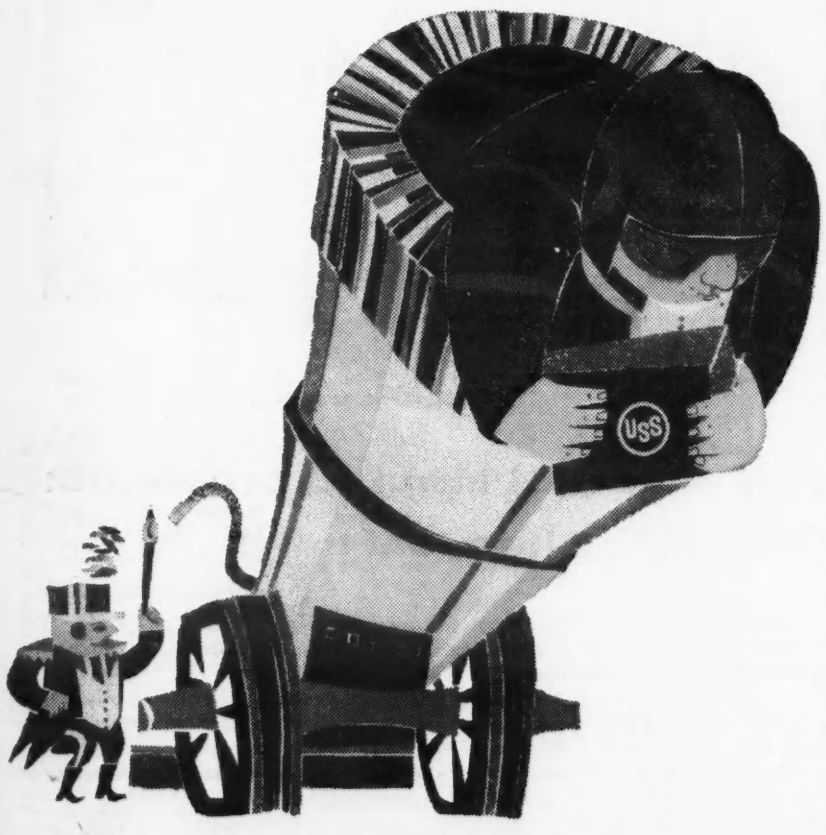

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Jobs & People

Davison Chemical Division of W. R. Grace & Co., Baltimore, Md. —**George H. Reid, jr.,** has been named manager of the Curtis Bay, Baltimore, mixed fertilizer plant. **H. N. Greenlay** has been transferred from Baltimore to New England as sales manager for that territory.

E. I. duPont de Nemours & Co., Wilmington, Del.—**Harold L. Sager** has been appointed assistant manager of the New England district sales office for the dyes and chemicals division.

Food Machinery & Chemical Corporation, New York—**Stafford L. Hopwood, jr.,** has been appointed assistant manager of the central chemical development department.

Hoffmann-La Roche, Inc., Nutley, N. J.—**Dr. Charles R. Adams** has joined the animal nutrition division as technical service manager.

George Lueders & Co., New York —**Joseph R. Dominica,** a member of the board of directors, was recently welcomed into the company's Twenty-Five Year Club. Fellow members presented him with a watch and a set of matched luggage.

McKesson & Robbins, Inc., New York—**Austin Gafney** has been appointed assistant purchasing manager of the chemical department. He was previously manager of the company's Kansas City chemical branch.

Minute Maid Corporation, Orlando, Fla.—**Frank J. Leforgeais** has been advanced to general manager of "Golden" citrus juices at Anaheim, Calif.

Monsanto Chemical Company, St. Louis, Mo.—Three managers of development have been appointed: **Dr. Lawrence H. Hannah** for herbicide products; **Dr. Paul F. Hoffman** for fungicides and insecticides and **Dr. Kenneth H. Maddy** for chemical feed additives.

National Starch & Chemical Corporation, New York—**Howard M. Smith** has been named to head the company's new laboratory in Atlanta, Ga.

Parke, Davis & Co., Detroit, Mich. —**J. C. Dilger** has been appointed manager of hospital and biological sales, succeeding **C. J. Cowles** who was recently named director of professional relations. **Dr. Ruth Palmes** has been appointed a clinical investigation medical writer at the company's research laboratories in Ann Arbor, Mich.

Texas Butadiene & Chemical Corporation, New York—**Jack L. Gogek,** previously with Koppers Company, has been appointed senior applications research chemist at TB&C's Miami, Fla., laboratories.

Union Carbide Chemicals Company, a division of Union Carbide Corporation, New York — **J. J. Glade** has been elevated to office manager of the Detroit, Mich., district sales office where he was previously a technical representative.

United States Borax & Chemical Corporation, New York—**W. L. Klatt** has been named assistant to the director of agricultural chemical sales.

Upjohn Company, Kalamazoo, Mich.—**Valdemar Christensen,** formerly divisional sales manager for the New York branch, has been elevated to sales manager of the branch, succeeding **H. H. McDade** who was transferred to the home office last spring.

Coal Chemicals

—*Continued from page 53*

production figures to back up his statement.

Since the current production of benzene does not appear to be increasing the tight relationship of the styrene monomer/benzene balance will continue until mid-1961 it is thought. Reason for this is that steel rate does not appear to be recovering and cannot be counted on to supply extra material for some months yet. Also mid-1961 will see the beginning of production of benzene at the great number of petroleum plants due to come on stream at that time.

Inventory of styrene continues naturally low as it must be consumed rapidly to avoid polymerization. Consequently the high rate of production is necessarily related to a high rate of consumption. While there has been some talk in the trade recently of lessening in growth for styrene, no concrete figures are yet available to give evidence of this.

Tariff Commission preliminary report for 1959 reveals the following information concerning styrene (all grades):

Production—1,571,311,000 pounds.
Sales—915,592,000 pounds.
Value—$105,751,000.
Unit Value—.12c.

Chemical Export Effort

—*Continued from page 4*

situations in selected foreign countries for fourteen groups of commodities, including pesticides, paints, and pharmaceuticals.

Addressing the monthly luncheon meeting of the chemical industry Washington representatives, William A. White, administrator of the Business & Defense Services Administration, detailed some of his department's work in the export field that is of concern to the chemical industry.

Noting that one of the problems faced by American industry in maintaining a strong economy is the increasing amount of imports, he pointed out that BDSA has the important function of making investigations of the effects of imports of a particular commodity on the national security when called upon by the director of the Office of Civil and Defense Mobilization.

To compete with Soviet Russia in the cold war and on the economic front, Mr. White added, "we are engaged in an export trade promotion program through which we will expand our services and assistance here and abroad in the interest of helping industry increase exports of US products."

To date, he pointed out, BDSA has held conferences on the export trade expansion program with these seven chemical groups: chemical specialties, drugs and pharmaceuticals, fertilizers, industrial chemicals, rubber and rubber products, plastic materials, and protective coatings.

Some of the problems on the foreign side which were mentioned included quota restrictions and licensing requirements; high tariff rates; surtaxes and other charges added to the invoice before ad-valorem duty is computed, and embargoes on importation of US goods to protect indigenous industry — although no such industry may exist.

Definitive information on such problems, Mr. White said, helps BDSA in seeking remedies through the General Agreement on Tariffs and Trade (GATT), individual countries, or other sources — and thus promotes chemical export sales.

National Distillers, IMC

—*Continued from page 3*

thirty-two ammonia stations in Minnesota.

International Minerals & Chemical Corporation contracted to buy E. Rauh & Sons Fertilizer Company, of Indianapolis, Ind., which sells fertilizer in a five-state area covering Illinois, Wisconsin, Indiana, Ohio and Michigan. The acquired company operates plants in Indianapolis, Plymouth, Ind., and Sylvania, Ohio.

On the basis of the closing stock prices on October 5, the International Minerals acquisition would involve, through an exchange of stock, an investment of $3.7 million.

Solvay to Expand Lab

—*Continued from page 3*

will be Solvay's technical service and market research divisions.

Among new projects expected to follow the expansion: Research into high temperatures, into space age uses for chromium chemicals, study of propylene oxide polyethers for use in urethane foams and in other applications.

The division is also planning extended research into chlorinated organic compounds for the pesticide and plastic industries and in the organic chemistry of hydrogen peroxide.

Chemical Trade Less Popular in High Court

—Continued from page 3

to keep a check on the industry for possible antitrust law violations, FTC conceived the idea of subpoenaing copies of the information reports filed with the Bureau of Census during the Census of Manufacturers undertakings.

Under the various census laws, congress has specifically provided that it shall be unlawful for any employee of the bureau or its parent agency, the Department of Commerce, to reveal any information concerning any individual company obtained in a census.

FTC Wants Retained Copies

To get around this prohibition, the FTC is proposing to force reporting companies to turn over their retained copies of schedules submitted to the Census Bureau. The issue has caused a rift in the government with the Commerce Department, supported by the Bureau of the Budget, strongly opposing the FTC effort. The Justice Department has taken no sides in the fight, but its antitrust division is believed to be sympathetic to FTC's efforts.

FTC has been rebuffed by the lower courts in seeking support of its subpoenas, but industry is fearful of what position the Supreme Court may take in view of its record of very liberal antitrust law enforcement. If the back door is opened to the FTC to obtain copies of the confidential information handed into the Census Bureau, industry people fear that it may eventually cause a serious downgrading of the value of the census reports.

Also, some of the industry-sponsored census undertakings by the bureau may be brought to an immediate end.

No date has yet been set for arguments in the duPont-GM case, nor will it be set until all the briefs are on file with the court. This is the second time the case has reached the highest court and now it involves the question of whether it is necessary for the duPont company and the duPont family interests to sell all their holdings of GM stock or simply give up their voting rights in such stock to bring the situation into compliance with the law.

When the Supreme Court ruled in 1957 on duPont's holdings of GM stock amounting to 23 percent of the outstanding common shares, it remanded the case to the Chicago Federal Court to determine the relief necessary to terminate the violation of the antitrust law.

Divestiture Called 'Not Necessary'

Judge LaBuy held, over the objections of the Justice Department, that divestiture of the stock was not necessary to satisfy the court's order. He ruled last year that duPont could continue to hold its GM stock and pass the voting rights on to its stockholders. He also ruled against the duPont family interests acquiring any more GM stock or holding any offices in GM.

The chemical industry's interest in the bicycle tariff case stems from the fact that this involves the question of whether the President has the right to modify a recommendation of the Tariff Commission for relief to an American industry under the "escape clause" of the trade agreements law.

The US Court of Customs & Patent Appeals ruled that congress so wrote the relief provisions in the "escape clause" as to require the submission of Tariff Commission recommendations to the President on a take-it-or-leave-it basis.

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AMINOETHYL-PIPERAZINE and AMINE AL-2

AMINOETHYLPIPERAZINE is a high-boiling triamine combining a primary, a secondary, and a tertiary amine group in a single molecule. AMINE AL-2 is a light-colored, distilled mixture of primarily heterocyclic polyamines containing about 60-65 per cent aminoethylpiperazine.

These polyamines, containing the piperazine nucleus, make excellent epoxy curing agents—impart good flexibility and high impact strength to the resin; excellent castings, laminates, and surface coatings are obtained. Suggested uses for their derivatives include corrosion inhibitors, asphalt anti-stripping agents, surfactants, and emulsion breakers.

Available in 55-gallon drums or tank cars. For technical information or samples, write Jefferson Chemical Company, Inc., 1121 Walker Avenue, P. O. Box 303, Houston 1, Texas.

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Scotch Firms Merge, Name Walker US Agent

J. F. Macfarlan & Co., and T. & H. Smith, Ltd., both of Edinburgh, Scotland, have organized a new chemical company, Macfarlan Smith, Ltd., to distribute in bulk the fine chemicals, alkaloids and anethetics manufactured by the two parent companies.

The newly-formed company will be represented in the US by Walker Chemicals, Inc., Mount Vernon, N.Y.

Founded in 1827, T. & H. Smith reportedly was among the first commercial producers of morphine from opium.

Propylene Glycol Alginate Cleared As Food Stabilizer

Propylene glycol alginate has been cleared for use as a stabilizer in frozen desserts by Food & Drug Administration under the food additives law. The order fixes the limit of use at 0.5 percent of the weight of the finished product.

A petition and supporting data to have the substance cleared was filed with the agency by Kelco Company, San Diego, Calif.

Pfizer Opens Research Center

—Continued from page 7

laboratories in Maywood, N.J., a biologics research center in Terre Haute, Ind., and research facilities in England, Chile, India and other countries overseas.

Participating in dedication ceremonies were Dr. Irvine H. Page, director of research at the Cleveland Clinic Foundation; Gov. Abraham A. Ribicoff of Connecticut; Pfizer president John E. McKeen, and Jasper H. Kane, the company's vice-president of research and development.

The new laboratories house some 400 scientists, technicians and supporting personnel.

Cabot Gives Itself New Name

—Continued from page 5

ture, refractory equipment and materials; Cabot Engineering Company, another subsidiary, is engaged in plant design, engineering, construction and maintenance. The corporation is also a major stockholder in two petrochemical concerns in the southwest.

Cabot operates jointly in Australia with another US major carbon black producer, and licenses plants in Holland, West Germany and Japan.

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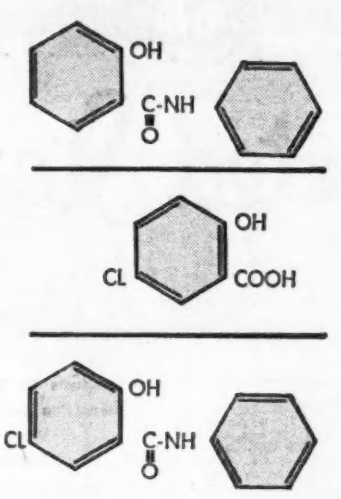
offered by PFISTER CHEMICAL WORKS in commercial quantities — suggested for use in pharmaceutical and dye intermediates . . . moth-proofing compounds . . . insecticides . . . anti-mildew agents . . . fungicides . . . bacteriocides



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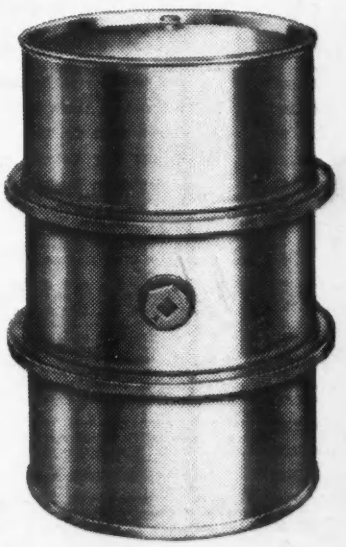

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ACETOPHENETIDINE—60 dms, Copenhagen
AGAR—35 cs, Meer Corp, Pusan
ALUMINUM HYDROXIDE—44 dms, Hudson Shipping Co, Liverpool
ALUMINUM POWDER—10 dms, H Solodow, Hamburg
AMINOPYRINE—20 dms, Hostachem Corp, Bremen
4 cks, Havre
AMMONIUM CARBONATE—200 cs, American Agricultural Chemical Co, Glasgow
15 dms, American British Chemical Supplies, Glasgow
45 dms, American Firstoline Corp, Rotterdam
AMYRIS OIL—8 dms, National City Bank, Miragoane
ANILINE DYES—10 dms, Heemsoth Kerner, Liverpool
26 dms, H Bruckmann & Lorbacher, Bremen
18 dms, Carbic Hoechst Corp, Rotterdam
39 dms, Geigy Chemical Corp, Havre
35 dms, Sandoz Inc, Havre
64 dms, Rotterdam
ANNATTO SEED—788 bgs, Foreign Domestic Distributors, Callao
ANTIMONY—24 cks, Watson Geach, Liverpool
ANTIMONY REGULUS—300 cs, Indussa Corp, Antwerp
800 cs, Rijeka
ARABIC GUM—758 bgs, Bank of N Y, Port Sudan
1,732 bgs, Bankers Trust Co, Port Sudan
1,041 bgs, Irving Trust Co, Port Sudan
BEESWAX—19 bgs, Lenape Trading Co, Aux Cayes
62 bgs, H Ih Pike & Co, Santiago
30 bgs, R B Willson, Progreso
26 bgs, Baldini & Co, Tampico
25 bgs, Machado & Co, Ciudad Trujillo
50 bgs, Strohmeyer & Arpe, Puerto Plata
50 blks, Lobito
40 bgs, Tampico
BENZOIN GUM—45 cs, Meer Corp, Singapore
BENZOSULFIMIDE—60 dms, Foster T Smith, Yokohama
BERGAMOT OIL—16 hf cs, Lo Curto & Funk, Messina
10 hf cs, Messina
BOIS DE ROSE OIL—5 dms, Fritzsche Bros, Iquitos
15 dms, Gillespie & Co, Iquitos
20 dms, Lo Curto & Funk, Iquitos
BRONZE POWDER—50 dms, Wm Recht Co, Hamburg
36 dms, Allied Manufacturing Co, Hamburg
CAJUPUT OIL—1 dm, Dodge & Olcott, London
CALCIUM CARBONATE—1,200 bgs, Pluess Staufer, Antwerp
CALCIUM CARBONATE, PRECIPITATED—300 bgs, H J Baker & Bro, Liverpool
CALCIUM PLUMBATE—5 dms, National Lead Co, Liverpool
CAMPHOR—30 cs, H A Gogarty, Hong Kong
CAMPHOR OIL—10 dms, Fritzsche Bros, Yokohama
CANDELILLA WAX—313 bgs, Tampico
CARAWAY OIL—13 dms, Norda Essential Oil & Chemical Co, Rotterdam
CARAWAY SEED—400 bgs, Louis Furth, Rotterdam
200 bgs, Greenwich Seed Co, Rotterdam
300 bgs, Rotterdam
CARNAUBA WAX—301 bgs, Colonial Trust Co, Tutoia
63 bgs, Chase Manhattan Bank, Tutoia
88 bgs, National City Bank, Tutoia
250 bgs, Bankers Trust Co, Tutoia
134 bgs, M Argueso & Co, Natal
56 bgs, Frank B Ross, Fortaleza
33 bgs, Colonial Trust Co, Fortaleza
168 bgs, Cornelius Wax Refining Corp, Fortaleza
63 bgs, Bank of London & S A, Tutoia
CASEIN—100 bgs, F H Paul & Stein Bros, Dublin
122 bgs, First Soice Co, Rotterdam
6,841 bgs, A J Mills & Co, Auckland
600 bgs F C Gerlach, Buenos Aires
500 bgs, N Y Soncor Corp, Buenos Aires
CASSIA—84 bls, Ludwig Mueller, Rotterdam
375 bls, Van Norden & Co, Saigon
CASTOR OIL—200 tons, Irving Trust Co, Fortaleza
CETYL OLEYL ALCOHOL—61 dms, A & S Corp, Nagoya
CHESTNUT EXTRACT—250 bgs, Texas American Dye & Chemical Corp, Marseille
CHINA CLAY—2,192 bgs Anglo American Clays Corp, Avonmouth
CHLORINATED RUBBER—900 bgs, C M C Chemicals, Liverpool
CHLOROQUINE DIPHOSPHATE—7 dms, American Roland Corp, Antwerp
CINNAMON QUILLS—15 bls, Curacao Trading Co, Colombo
50 bls Delano Corp of America, Colombo
25 bls, Louis Furth, Colombo
100 bls, Colombo
CITRONELLA OIL—6 dms, Polarome Manufacturing Co, Colombo
11 dms, Magnus Mabee & Reynard, Colombo
25 dms, Lo Curto & Funk, Puerto Barrios
CLOVE—300 bgs, Zanzibar
COBALT OXIDE—280 cks, Antwerp
COCONUT OIL—577 tons, Wells Fargo Bank, Zamboanga
473 tons, Bank of America, Zamboanga
375 tons, Marwood Co, Cebu
365 tons, American Trust Co, Cebu
COCONUT SHELL CHARCOAL—1,200 bgs, Colombo
COD OIL—100 dms, Marcus L Bistritzky, St Johns
100 dms, Ottol Oil Co, St Johns
CODLIVER OIL—50 dms, Arista Oil Products Corp, Bergen
100 dms, Peder Devold Oil Corp, Bergen
COLORS, DRY—1,800 bgs, Naftone Inc, Bremen
25 dms, Gothenburg
90 dms, Bremen
COPAL GUM—500 bgs, Archer Daniels Midland Co, Matadi
84 bgs, Chase Manhattan Bank, Matadi
94 bgs, O G Innes Corp, Matadi
142 bkts, Wm H Scheel, Singapore
40 bgs, Wm H Scheel, Singapore
25 bkts, O G Innes Corp Singapore
67 bgs, Wm H Scheel, Manila
80 bkts, O G Innes Corp, Macassar
CORN OIL—260 tons, Corn Products Co, Rotterdam
CORN STARCH—400 bgs, Manhattan Adhesives Corp, Antwerp
1,548 bgs, Rotterdam
620 bgs, Antwerp
CREAM OF TARTAR—1,250 bgs, Leonhardt & Brush, London
CRESYLIC ACID—4 dms, Van Oppen & Co, Avonmouth
CUBE ROOTS—1,283 bls, Merton Trading Co, Iquitos
CUTTLE FISH BONE—200 cs, Morgan Guaranty Trust Co, Kobe
CYSTEINE HYDROCHLORIDE—1 dm, Lo Curto & Funk, Bremen
DAMMAR GUM—25 cs, Wm H Scheel, Bangkok
DEGRAS—22 dms, Gerhard & Hey, Liverpool
29 dms, N I Malmstrom, Liverpool
60 dms, Olympic Shipping Co, Liverpool
50 dms, Gallard Schlesinger, Bremen
DEGRAS FATTY ACIDS—56 dms, N I Malmstrom, Liverpool
DEHYDROACETIC ACID—6 kgs, Croda Inc, Liverpool
DEXTRIN—742 bgs, Stein Hall & Co, Rotterdam
300 bgs, Manufacturers Trust Co, Rotterdam
DIPHENYL SULFONE—5 cs, Marseille
95 bgs, Marseille
DYES, COALTAR—6 cans, Toms River Cincinnati Chemical Corp, Rotterdam
56 dms, H Bruckmann & Lorbacher, Hamburg
EARTH COLORS—1,450 bgs, Naftone Inc, Bremen
600 bgs, Naftone Inc, Rotterdam
450 bgs, Rotterdam
ESPARTO WAX—48 bgs, Glasgow
FISH OIL, RESIDUE—160 dms, C W Keyes, St Johns
FUEL OIL—124,407 bbls Asiatic Petroleum Corp, Punta Cardon
128,753 bbls, Humble Oil Co, Caripito
114,110 bbls, Shell Caribbean Petroleum Corp, Punta Cardon
138,712 bbls, Metropolitan Petroleum Corp, Puerto La Cruz
FURFURAL—893 tons, E I du Pont de Nemours & Co, La Romana
GALL—6 cks, Van Gelder Fanto Corp, Timaru
3 cks, Wilson & Co, Timaru
7 cks, Cosmos Shipping Co, Timaru
1 ck, Wilson & Co, Lyttelton
6 cks, Comos Shipping Co, Port Chalmers
5 cks, Cosmos Shipping Co, Auckland
8 cks, Cosmos Shipping Co, Wellington
GELATIN—300 bgs, T M Duche & Sons, Antwerp
22 dms, Corbett & Co, Marseille
300 bgs, King Shipping Co, Gothenburg
35 dms, H Bruckmann & Lorbacher, Rotterdam
141 dms, D H Burdett, Avonmouth
125 bgs, D H Burdett, Avonmouth
60 bgs, B Young, London
65 dms, B Young, London
100 bbls, Antwerp
GERANIUM OIL—5 dms, J Manheimer, Algiers
GLANDS, PITUITARY—1 cs, Van Gelder Fanto Corp, Hamburg
GLUE—100 bgs, H Bruckmann & Lorbacher, Bremen
GLUESTOCK—238 bgs, Eastman Kodak Co, Liverpool
d-GLUTAMIC ACID—3 cs, Ajinomoto Co, Yokohama
GLYCERINE—152 dms, C J Schellings & Co, Havana
104 tons, I. Pasternak, Buenos Aires
GLYCOL MONOSALICYLATE—50 cs, Havre
GRAPHITE—500 bgs, Asbury Graphite Mills, Hong Kong
535 bgs, Joseph Dixon Crucible Co, Colombo
GYPSUM, CRUDE—10,464 tons, U S Gypsum Co, Little Narrows
10,454 tons, U S Gypsum Co, Hantsport
3,460 tons, National Gypsum Co, Walton
HEMATOXYLIN—2 dms, American Dyewood Co, Glasgow
IODINE, CRUDE—100 dms, Bunge Corp, Yokohama
96 kgs, Mitsubishi Corp, Yokohama
IRON BLUE—12 dms, Van Oppen & Co, Liverpool
IRON OXIDE—100 bgs, Hudson Shipping Co, Oslo
KAOLIN—3 cs, A L Ettlinger, Hamburg
LACTALBUMIN—1,344 bgs, A J Mills & Co, Auckland
LACTOSE—5 dms, D Hauser, Hamburg
LAMPBLACK—800 bgs, Smith Chemical & Color Co, Rotterdam
LAURYL PEROXIDE—20 dms, Rotterdam
LAVANDIN OIL—4 bbls, Fritzsche Bros, Marseille
3 cks, Charabot & Co, Marseille
11 dms, Tombarel Products Corp, Cannes
LEMON OIL—3 dms, Ungerer & Co, Vera Cruz
2 hf cs, National City Bank, Messina
LEMONGRASS OIL—30 dms, Norda Essential Oil & Chemical Co, Cochin
18 dms, National City Bank, Cochin
LIME OIL—1 dm, N M Albert Co, Puerto Barrios
4 dms, Citrus & Allied Essential Oils Co, Miragoane
10 dms, Ungerer & Co, Tampico
LITHARGE—184 dms, Eagle Picher Co, Tampico
LIVERMEAL—400 bgs, H S C Trading Co, Montevideo
600 bgs, Wessel Duval & Co, Montevideo
LIVER PASTE—3 dms, Reheis Co, Montevideo
LIVER POWDER—37 dms, Van Gelder Fanto Corp, Buenos Aires
33 dms, Reheis Co, Montevideo
LOCUST BEAN GUM—300 bgs, P A Dunkel, Rotterdam
2, 6-LUTIDINE—2 dms, Van Oppen & Co, Avonmouth
MACE—14 cs, Catz American Co, Macassar
31 cs, Foreign & Domestic Sales Corp, Singapore
14 cs, Singapore
MAGNESITE—20 dms, Manufacturers Trust Co, Hamburg
885 bgs, Cochin
MAGNESIUM CARBONATE—1,200 bgs, Reheis Co, Liverpool
MANGROVE EXTRACT—180 bgs, Saxe Cutch Corp, Singapore
MARJORAM LEAVES—100 bls, Levy & Levis Co, Marseille
100 bls, Louis Furth, Marseille
MELAMINE—200 bgs, Liverpool
MENTHOL—14 dms, Fritzsche Bros, Buenos Aires
MERCURIC OXIDE—50 cs, Troy Chemical Co, Rotterdam
MERCURIC OXIDE, YELLOW—18 bbls, Rijeka
1 cs, Rijeka
MERCURY—810 flks, Cadiz
MINERAL LUBRICATING OIL—200 dms, Asiatic Petroleum Corp, Rotterdam
MOLASSES—1,849,938 gals, Istituto Cubano De Est Del Azucar Puerto Padre
550 tons, W R Grace & Co, Salaverry
MONOCHLOROACETIC ACID—1,839 dms, International Selling Corp, Marseille
MONOHYDRAZINE SULFATE—1 kg, London
MONTAN WAX—50 bgs, Rotterdam
NAPHTHALENE—53 dms, Toms River Cincinnati Chemical Corp, Rotterdam
NUTMEG—56 bgs Gillespie & Co, Port of Spain
50 bgs, M J Golombeck, Port of Spain
63 bgs, M J Golombeck, Singapore
140 bgs, National City Bank, Rotterdam
260 bgs, K Landes & Co, Singapore
322 bgs, Singapore
OENANTHOL—80 cks, Rhodia Inc, Marseille
OITICICA OIL—70 tons, Irving Trust Co, Fortaleza
OJEFICIN POWDER—9 dms, Astoria Pan Americana, Iquitos
OLIVE OIL—50 dms, Manufacturers Trust Co, Seville
125 dms, Hanover Bank, Seville
123 dms, Atlantic Bank of N Y, Seville
150 dms, Swiss Credit Bank, Seville
50 dms, Societe General, Seville
25 dms, J H Schroder, Seville
25 dms, Chase Manhattan Bank, Seville
49 dms, Unanue & Sons, Seville
49 dms, First National Chicago, Seville
250 dms, Gem Packing Co, Seville
100 dms, Masealades Bros, Cadiz
OREGANO LEAVES—600 bgs, H Marmorek & Son, Piraeus
229 bgs, G A Athans Co, Calamata
PALM OIL—301 tons, Stein Hall & Co, Belawan Deli
740 tons, Balfour Guthrie, Matadi
75 dms, Matadi
PALMKERNEL OIL—199 tons, Procter & Gamble Co, Matadi
419 tons, Balfour Guthrie, Matadi
933 tons, E F Drew & Co, Matadi
299 tons, Matadi
PAPAIN—100 cs, I Levine, Colombo
50 cs, Empire Trust Co, Colombo
34 cs, Bemo Shipping Co, Mombasa
269 cs, Chas L Huisking & Co, Mombasa
20 cs, Mombasa
PAPRIKA—200 bgs, M J Golombeck, Hamburg
PATCHOULI OIL—12 dms, International Flavors & Fragrances Inc, Penang
10 dms, Dodge & Olcott, Penang
2 dms, Perry Bros, Penang
5 dms, Centflor Manufacturing Co, Penang
PEATMOSS—1,450 bls Ascot Peatmoss Corp, Hamburg
7,770 bls, Garden Supply Co, Bremen
250 bls, C Fafard, Hamburg
750 bls, Halfmoon Trading Co, Rotterdam
2,000 bls, Premier Peatmoss Corp, Bremen
1,800 bls, E Dunwoody, Bremen
1,000 bls, New Amsterdam Import Co, Bremen
250 bls, Marine Midland Trust Co, Hamburg
3,250 bls, E J Lang, Bremen
750 bls, S Davis Co, Bremen
250 bls, C Fafard, Bremen
1,500 bls, Marine Midland Trust Co, Bremen
6,000 bls, Premier Peatmoss Corp, Hamburg
7,000 bls, E J Lang, Hamburg
PECTIN—108 dms, T M Duche & Sons, Copenhagen
27 dms, Royal Bank of Canada, Copenhagen
PEPPER, BLACK—140 bgs, Internatio Rotterdam, Singapore
80 bgs, East India Trading Co, Cochin
140 bgs, W L Wiltner, Singapore
40 bgs, J H Elton, Singapore
490 bgs, Singapore
250 bgs, Belem-Para
240 bgs, Cochin
PEPPER, RED—525 bgs, M J Golombeck, Algiers
PETITGRAIN OIL—12 dms, Gillespie & Co, Asuncion
6 dms, Fritzsche Bros, Asuncion
PETROLEUM, CRUDE—125,000 bbls, Rock Island Petroleum Corp, Puerto La Cruz
219,914 bbls, Ashland Oil Co, Maracaibo
417,363 bbls, California Oil Co, Sidon
232,010 bbls, Kerr McGee Oil Co, La Salina
PHTHALIC ANHYDRIDE—416 bgs, International Chemical Corp, Liverpool
PITUITARY POWDER, ANTERIOR LOBE—2 cs, Van Gelder Fanto Corp, Buenos Aires
POTASSIUM GUAIACOLSULFONATE—20 dms, American Roland Corp, Antwerp
POTASSIUM METABISULFITE—25 kgs, A Gusmer, Liverpool
PROPYTHIOURACIL—3 cs, Lo Curto & Funk, Hamburg
PRUSSIAN BLUE—45 dms, Tar Residuals Inc, Rotterdam
PYRETHRUM EXTRACT—10 dms, Prentiss Drug & Chemical Co, Matadi
25 dms, McLaughlin Gormley King Co, Matadi
PYRIDINE—60 dms, Antwerp
RAUWOLFIA SERPENTINA ROOT—310 bgs, Meer Corp, Bangkok
RETAMO WAX—20 bgs, Cornelius Wax Refining Corp, Buenos Aires
RICE STARCH—300 bgs, American Key Products, Trieste
SABADILLA SEED—18 bgs, Foreign Domestic Distributors, Callao
SAGO FLOUR—109 bgs, Manhattan Adhesives Corp, Singapore
891 bgs, Singapore
SALICYL-AZO-SULFAPYRIDINE—80 dms, Pharmacia Lab, Gothenburg
SANTAL OIL—2 dms, Olfactors Inc, Port Au Prince
SEEDLAC—100 bgs, Gillespie Rogers Pyatt, Bangkok
100 bgs, Wm Zinsser & Co, Bangkok
SESAME OIL—50 dms, Heemsoth Kerner, Copenhagen
SHELLAC—80 bgs, F H Paul & Stein Bros, Bremen
SHELLAC WAX—40 bgs, F H Paul & Stein Bros, Bremen
SODIUM BOROHYDRIDE—40 dms, Metal Hydrides Inc, Hamburg
SODIUM CYANIDE—100 dms, Ugine Industries, Havre
300 dms, Chemical Manufacturing Co, Liverpool
SODIUM HEXAMETAPHOSFATE—400 cks, Benckiser Inc, Rotterdam
SODIUM HYDROSULFITE—160 dms, Toms River Cincinnati Chemical Corp, Rotterdam
SODIUM SULFATE—3,000 bgs, Lo Curto & Funk, Antwerp
TAMARINDS—10 bbls, S B Penick & Co, St Johns
8 bbls, Murbas Trading Co, Port of Spain
TAPIOCA FLOUR—3,088 bgs, Stein Hall & Co, Kohsichang
5,080 bgs, Morningstar Paisley Inc, Kohsichang
560 bgs, Tapioca Associates, Kohsichang
1,120 bgs, Poons Co, Kohsichang
440 bgs, Stein Hall & Co, Lome
1,344 bgs, Kohsichang
TAR ACID—1 dm, Van Oppen & Co, Avonmouth
TARTARIC ACID—100 dms, Frank Samuel & Co, Marseille
100 bgs, Frank Samuel & Co, Marseille
THYROID POWDER—21 dms, Hudson Pharmacal Co, Copenhagen
TONKA BEANS—9 cks, Machado & Co, Port of Spain
202 cks, Royal Bank of Canada, Port of Spain
80 cs, Meer Corp, Belem-Para
TRICHLOROETHYLENE—250 dms, International Selling Corp, Marseille
200 dms, Chemical Manufacturing Co, Liverpool
40 dms, Antwerp
TUNG OIL—500 tons, Bunge Corp, Buenos Aires
277 tons, Buenos Aires
UREA—1,500 bgs, Nylos Trading Co, Genoa
50 bgs, Maurbeni Iida Co, Yokohama
VANILLA BEANS — 10 cs, National City Bank, Cristobal
119 cs, Djibouti
WAX, SYNTHETIC—300 bgs, Moore & Munger, Durban
ZINC OXIDE—500 bgs, Aceto Chemical Co, Liverpool
ZINC SULFIDE—100 bgs, C J Osborn Co, Rotterdam

Los Angeles

ASBESTOS FIBER — 1,400 bgs, Johns Manville Corp, Capetown
300 bgs, N American Asbestos Corp, Durban
CARAWAY SEED—50 bgs, A J Fritz, Rotterdam
CASSIA—86 bgs, Hismoco American Co, Singapore
250 bls, Hismoco American Co, Saigon
COPRA—500 tons, Cargill Inc, Tobaco
150 tons, American Trust Co, Tacloban
500 tons, Pacific Vegetable Oil Corp, Tacloban
100 tons, American Trust Co, Borongan
500 tons, Pacific Vegetable Oil Corp, Borongan
CORN STARCH—100 bgs, Geismar & Co, Rotterdam
EARTH COLORS—220 bgs, H Hartry, Rotterdam
FUEL OIL—103,226 bbls, Standard Oil Co, Punta Cardon
173, 149 bbls, Texaco Co, Point a Pierre
GUAR GUM—600 bgs, Hathaway Allied Products, Genoa
LOCUST BEAN GUM—400 bgs, Hathaway Allied Products, Genoa
NAPHTHA—134,472 bbls, Wilshire Oil Co, Tokuyama
PAPAIN—74 cs, Wm E Martin & Son, Matadi
PETROLEUM, CRUDE—215,663 bbls, Wilshire Oil Co, Bandar Mashur
85,000 bbls, Seoul Oil Co, Bandar Mashur
461,053 bbls, Union Oil Co, Mina Al Ahmadi
ZINC OXIDE—800 bgs, F D Davis Co, London

Philadelphia

ASBESTOS FIBER—1,067 bgs, Keasby & Mattison, Manchester
CALCIUM CARBONATE — 1,200 bgs, Whittaker Clark & Daniels, Liverpool
CHESTNUT EXTRACT—500 bgs, Tac Tannins & Chemicals Inc, Marseille
800 bgs, Barker Importing Co, Naples
CRESYLIC ACID—60 dms, J Faunce, Manchester
50 dms, Concord Chemical Co, Manchester
CRYOLITE, SYNTHETIC—300 bgs, Venice
FISHLIVER OIL—65 dms, J Faunce, Yokohama
GYPSUM, CRUDE—8,604 tons, U S Gypsum Co, Hantsport
MAGNESIUM OXIDE—600 cs, Maurer Co, Liverpool
MENTHOL—110 cs, Keelung
MOLASSES—408,705 gals, Publicker Co, Puerto Padre
PERCHLOROETHYLENE—50 dms, International Selling Corp, Yokohama
PETROLEUM, CRUDE—196,331 bbls, Mobil Oil Co, Banais
236,799 bbls, Mobil Oil Co, Covenas
89,809 bbls, Mobil Oil Co, El Palito
174,140 bbls, Texaco Co, Punt de Palmas
149,045 bbls, Texaco Co, Pamatacual
157,812 bbls, Texaco Co, Pointa Pierre
116,475 bbls, Atlantic Refining Co, La Salina
229,978 bbls, Atlantic Refining Co, Puerto La Cruz
134,550 bbls Atlantic Refining Co, Pamatacual
130,772 bbls, Gulf Oil Corp, Mina Al Ahmadi
215,709 bbls, Gulf Oil Corp, Khorg Island
122,942 bbls, Atlantic Refining Co, Punt de Palmas
SODIUM BICARBONATE — 1,249 bgs, Chemical Manufacturing Co, Liverpool
TAPIOCA FLOUR—1,456 bgs, Stein Hall & Co, Bangkok
600 bgs, Morningstar Paisley Inc, Kohsichang
1,000 bgs, Morningstar Paisley Inc, Itajai
TAR ACID—50 dms, Concord Chemical Co, Manchester
XYLENOL—151 dms, Concord Chemical Co, Liverpool

San Francisco

ASBESTOS FIBER — 5,800 bgs, Johns Manville Corp, Honekong
4,450 bgs, Johns Manville Corp, Cape Town
720 bgs, N American Asbestos Corp, Durban
4,780 bgs, Keasby & Mattison, Lourenco Marques
400 bgs, Lourenco Marques
CARAWAY SEED — 100 bgs, Wheeler & Miller, Rotterdam
COPRA—1,000 tons, Cargill Inc, Iloilo
1,000 tons, Cargill Inc, Cebu
DILL SEED — 100 bgs, California Commodities Corp, Bombay
GINGER—[illegible] & Co, Cristobal
IRON OXIDE—300 bgs, Fulton National Bank, Oslo
KELPMEAL—400 bgs, W A Sieberk, Bergen
MOLASSES—2,791 tons, S Western Sugar & Molasses Co, Manila
PEPPER, BLACK—490 bgs, C Czarin Kow, Singapore
POTASSIUM PERSULFATE—317 bgs, Dow Chemical Co, Rotterdam
STARCH—50 bgs, Stein Hall & Co, Rotterdam
TAPIOCA FLOUR—1,730 bgs, H M Newhall & Co, Kohsichang
560 bgs, Stein Hall & Co, Kohsichang

Petroleum Derivatives

In an oil market that otherwise faces a world-wide oversupply situation, the petroleum derivatives sector displays uncommon stability and firmness. Benzene persists in its tight supply position with material being called for as soon as it becomes available and toluene shows signs of firming in the export area. Xylene supply has been influenced by heavy demand for the fractions, according to trade sources. Waxes remain the paragon of steadfastness with demand continuing good and supply adequate to meet all calls.

Daily average production of natural gas liquids in July was 7 percent above July 1959 according to Bureau of Mines. Daily average production of liquefied gases at refineries was 8 million gallons, 20 percent above July 1959.

Ethane-ethylene production in July was 18 percent above the same month in 1959.

Daily average demand for liquefied gases for fuel and chemical uses decreased 4 percent from July 1959.

Stocks of liquefied gases excluding ethane totaled 1,180 million gallons, an increase of 156 million gallons during July 1960. Underground stocks of liquefied gases totaled 951 million gallons, 20 million gallons less than a year ago.

The daily average demand for natural gasoline was 12 million gallons, an increase of 1 percent from July 1959.

Aromatic Solvents

Benzene — Petroleum producers this year are turning out material at a rate 38 percent higher than last year based on figures reported to the Tariff Commission through July.

Total from petroleum through July this year: 170 million gallons.

Total from petroleum through July last year: 105 million gallons.

Average monthy production of benzene this year is 24.2 million gallons as compared with 15 million gallons last year.

In the current market supply continues on the tight side despite the efforts of petroleum producers to supply all needs.

Toluene — Firm export market conditions are noted by trade.

Word reached New York from the Gulf last week that difficulties were being encountered in efforts to make up a large volume shipment to Europe. From time to time in the last few months similar experiences have been reported confirming a tight export situation. Indicative of this snug position is the export price of toluene which has been edging up fractionally from 18c. to near 19c. a gallon.

On the domestic scene toluene continues to readily available on call when requests are for reasonable amounts.

Talk of dissatisfaction by producers with current domestic price structure was encountered in the trade last week. Present terms, 25c. a gallon delivered, have been in effect since April, 1958, without change.

Apparently there is some thought in the trade to changing the present schedule to an f.o.b. basis and leaving the 25c. price as is. Thus the consumer would bear the freight costs leaving the producer with an even amount of income regardless of the distance the solvent had to travel and the method of transportation employed.

Under the present system producers are finding it increasingly more attractive to deal with the export market in the Gulf at prices approaching 19c. than to ship to some points in the north and midwest for 25c., delivered, especially when a re-seller is involved.

Consumer reaction, especially of those located away from industrial complexes where freight costs would be highest, is bound to be adverse if the proposal is actually made. As far as can be learned there is no evidence that such a proposal to change sales terms is contemplated for the immediate future, but it is known that a change in terms would not be exactly unwelcome to producers.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Oct. 9, 1959
103.74	103.74	103.74	103.04

For Current Prices see page 9

Aliphatic Solvents

Hexane—In view of a good cotton crop and expectations of what may be a record soybean harvest, the prospects for solvent extraction of oils appear to be excellent.

One trade source last week commented that extraction is moving at a high level and that sales of hexane have been the steadiest of the solvents and present an altogether bright picture.

Prices are unchanged from previous reports.

Stoddards Solvent—The cool summer weather that prevailed over most of the nation this year appears to have had some adverse effect on the sales of solvent to the dry cleaning industry.

That's the opinion of one trade observer on the marketing end of the business.

A spokesman for the dry cleaning industry, representing consumers, was contacted last week and agreed that some cleaners had complained to him of decreased volume. However, the source continued, no figures were yet available to confirm or deny the existence of any industry-wide diminished summer volume.

In the current market early winter cleaning and storage of clothing appears to be stimulated by the cool weather. A factor also in the resurgence of demand for solvent is the opening of schools, traditionally one of the periods of peak dry cleaning.

VM&P Naphtha—Paint manufacturers appear to be cautious at present in their estimates of next year's market according to one trade source.

Result is that vm&p and mineral spirits are moving but not with optimism.

The number of housing starts seems influential in the thinking of many in the industry. Present figure of 1.2 million is below the level necessary to stimulate confidence. Interested parties are anxious to see that figure rise to 2 million before predicting a big year.

LPG's

Butane—Production in the period September 1-15 registered 77.7 million gallons, slightly more than the volume produced in the same period last year.

Stocks as of September 15 were 383.4 million gallons, some 132 million gallons higher than stocks on the same date in 1959.

Ethane-ethylene—Output totaled 22.9 million gallons in the first two weeks of September as compared with 21.3 million gallons in the same period last year.

Inventory on September 15 was 913 thousand gallons, the same as on September 15 of last year.

Miscellaneous

Current reports of the industry for the week ended September 23, 1960 indicate an increase in crude-oil production and a decrease in crude runs. According to the API, the daily average output of crude (including lease condensate) was 6,877,000 barrels, an increase of 30,000 barrels from the preceding week. Daily average crude runs to stills of 7,963,000 barrels were 120,000 barrels below the preceding week, and 241,000 barrels above the week ended September 25, 1959. Runs of foreign crude amounted to 1,178,000 barrels daily, compared with 1,008,000 barrels in the preceding week. For the four-week period ending September 23, crude oil production averaged 6,856,000 barrels daily, and crude runs to stills average 8,153,000 barrels daily with runs of foreign crude averaging 1,073,000 barrels daily.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended Sept. 24 totaled 230,362,000 barrels, according to data reported by the Bureau of Mines. Compared with the total of 229,943,000 barrels for the preceding week, this represents an increase of 419,000 barrels, comprising an increase of 1,598,000 barrels in stocks of domestic crude and a decrease of 1,179,000 barrels in stock of foreign crude.

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Drugs, Fine Chemicals

Beginning October 1, contract customers started paying appreciably more for bromoform (pharmaceutical grade), magnesium bromide, strontium bromide and USP trichloroacetic acid. Prices for bromoform are uniformly 5 cents a pound higher with the new 5-gallon carboy listing $1.95 a pound. Magnesium bromide is 20 cents higher at $1.15 a pound for an 80-pound drum, and strontium bromide is 16 cents higher at $1 a pound for a 150-pound drum. Up 10 cents, USP trichloroacetic acid is quoted at $1.25 a pound for a 100-pound drum.

Elsewhere in the market, however, the trend is generally downward. Effective September 22, neomycin sulfate was dropped 7 cents, to 18 cents a gram in lots of 1 kilo or more, and two weeks before, vitamin B_{12} products were cut sharply.

Dihydrostreptomycin is also lower, at a reported range of $32 to $35 a kilo, following Food & Drug Administration's announcement of proposed changes in labeling regulations. These would, in effect, restrict the market for DHS almost exclusively to veterinary medicines, but at the same time boost requirements for streptomycin. As previously noted here, only three of the five firms that used to manufacture DHS are doing so today.

In a two-year clinical study of over 1,300 patients chlormezanone was found to be one of the most satisfactory muscle relaxant-tranquilizers available. Marketed under the tradename "Trancopal," the drug was administered orally in the recommended dose of 100 mg. three times daily to treat 1,041 patients with various muscoloskeletal disorders. Additionally, it was given to a second group of 350 patients with allergic symptoms complicated by anxiety and restlessness.

As reported in *Current Therapeutic Research*, 99 percent of the first group experienced complete or marked relief of spasm and pain "within a short period of time." And as a tranquilizing agent, "Trancopal" produced good results in 76 percent of the 350 patients with an allergy and significant symptoms, plus physical symptoms in some cases.

Aminophylline—A major supplier is now offering a new "free-flowing" type of aminophylline USP. This material can be compressed directly into tablets, thus eliminating the need of granulation or slugging. Additionally, it has an exceptionally low water content, and greater stability.

A company spokesman says the "free-flowing" aminophylline meets completely the revised specifications of the United States Pharmocopoeia of October 1, 1960.

The amended definition reads: "Aminophylline contains not less than 84.5 percent and not more than 86.0 percent of anhydrous theophylline ($C_7H_8N_4O_2$), and not less than 14.0 percent and not more than 14.6 percent of ethylenediamine ($C_2H_8N_2$), both calculated on the anhydrous basis."

Cortisone—August exports of cortisone, including ACTH and derivatives, were valued at $160,314. This compares with $529,289 in July and $80,212 in June.

On the buyers roster in August were: Canada $43,885; West Germany $34,000; Bermuda $18,803, and Panama $14,095.

Up from $484,658 in July, August exports of hydrocortisone were valued at $504,190. This material went mainly to France ($306,000), Canada ($74,803), West Germany ($43,722), and Bermuda ($15,200).

In kilo lots, hydrocortisone is listed domestically at $1.10 a gram, cortisone at $1.05 a gram. Price weakness persists.

Price Trends

Advanced
Bromoform, 5c. per lb.
Magnesium bromide, 20c. per lb.
Strontium bromide, 16c. per lb.
Trichloroacetic acid, USP, 10c. per lb.

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Oct. 9, 195
59.77	59.78	59.93	60.23

For Current Prices see page 9

Dihydrostreptomycin — Food & Drug Administration has proposed new and stringent regulations for labeling of DHS containers. Suggested is this label for DHS and its solutions: Warning—for use only in patients who cannot tolerate streptomycin."

In announcing proposed changes in labeling requirements, FDA referred to recent information indicating that as little as two to five grams of the antibiotic could impair a patient's hearing which effect could be delayed several months.

This potential chronic toxicity of DHS, reported earlier in the "literature," is what decided one large producer to halt production several months ago. Queried by OPD recently, the firm indicated it was no longer offering DHS either singly or in combination forms for use in human medicines in the US. A company spokesman said, however, that it was continuing to supply its veterinary subsidiaries from existing stocks.

This was the second firm to halt production of DHS. About a year ago, another firm bowed out, discouraged, reportedly, by overcapacity and continually downtrending prices. As a result, there are only three bulk producers of DHS currently. And as long as there is good demand for DHS for use in veterinary medicines (principally poultry) these three will probably remain. Of course, if another firm did quit production, the market would probably firm up quite quickly.

August exports of bulk DHS amounted to 1,626,734 grams and were valued at $89,273. Exports of dosage forms were 384,853 grams, valued at $21,943.

Domestically, DHS is selling at prices ranging from $32 to $35 a kilo, depending upon quantity.

Gelatin—Entering September, gelatin producers held stocks totaling 11,264,000 pounds. This compared with 11,308,000 a month earlier and 11,651,000 a year earlier.

Accounting for the decline in inventory in August was an excess of shipments over production, both of which, however were up appreciably from July levels.

Production of gelatin in August amounted to 4,428,000 pounds, up from 3,800,000 in July and 3,892,000 in August 1959. Of the total, 4,029,000 pounds were manufactured from hides while 399,000 pounds were ossein-derived.

Classified by type, output was in thousands of pounds: edible 3,536; technical 79; pharmaceutical 279, and photographic 534.

Shipments of gelatin in August climbed to 4,472,000 pounds from 3,493,000 in July

—Continued on page 60

Drugs and Fine Chemical Exports: August

Exports of selected drugs and fine chemicals for the months of July and August as reported by the Bureau of Census, were as follows:

		August	*July*
Analgesics and antipyretics	lbs.	44,859	17,421
Antibiotics, n.e.c.	grs.	12,512,753	9,745,966
Ascorbic Acid	lbs.	86,829	104,765
Aspirin	lbs.	83,130	165,781
B-complex (excluding B_1 and B_{12})	lbs.	33,309	27,150
Bacitracin	100-million-units	4,184	8,230
Dihydrostreptomycin, bulk	gms.	1,626,734	4,191,205
Pectin and preparations	lbs.	77,677	65,982
Penicillin, bulk	billion units	7,862,589	6,631,627
Streptomycin, all forms	gms.	7,514,087	6,130,829
Sulfa Drugs	lbs.	73,376	55,828
Thiamin	lbs.	8,233	4,559
Vitamin A bulk and medicinal	lbs.	6,524	6,895
Vitamins, n.e.c.*	lbs.	53,826	104,191

*Not elsewhere classified by the Census bureau.

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Drugs, Fine Chemicals

—Continued from page 58

and 4,215,000 in August 1959. By type, shipments were, in thousands of pounds: edible 3,120; technical 169; pharmaceutical 289; and photographic 894.

Stocks, totaling 11,264,000 pounds, were classified as (in thousands of pounds): edible 5,866; technical 910; pharmaceutical 1,088, and photographic 3,400.

Neomycin—A new and lower schedule was established September 22 for neomycin sulfate. Reduced 7c., lots of 1 kilo or more are now listed at 18c. a gram, while lots of 100 to 999 grams are listed at 25c. a gram, down 5c.

A desire to spur interest in this antibiotic, which has been used in topical and opthalmic ointments and more recently in a deodorant called "Hi and Dri," may have motivated the price change.

Niacin—Indications are that the market is still highly competitive. Prices lower than the officially listed $4 a kilo have been heard but several trade sources maintain that they are not meeting them. A quote of $3 a kilo is rumored but this seems unbelievably low.

Prednisone—August exports of prednisone were valued at $40,056, compared with $38,867 the previous month. The largest single shipment, worth $40,056, went to Panama, according to Commerce department statistics. Material also went to Belgium ($7,132) and Cuba ($2,061) and several other countries, located predominately in Europe and South America.

Exports of prednisolone, which appears to be finding increasing favor abroad, were valued at $1,689,666 in August. The prior month, exports were worth $1,061,823 and in June, $590,005.

Based on dollar value—volume is not disclosed—major shipments of prednisone in August went to: Mexico $254,884; Cuba $115,917; Argentina $106,860; Italy $101,676; Panama $82,995; West Germany $56,649; and Bermuda $52,630.

Among many other buyers was the USSR which took material worth $7,295.

As an overall trend, exports of prednisolone seem to be rising, while prednisone exports decline. Commerce department statistics show the value of prednisolone exports rose to $18,164,575 in 1959 from $11,434,542 in 1958, while prednisone exports went to $2,077,073 from $3,506,718.

Sulfa Drugs — Domestic requirements are multiplying but sales volume, according to some trade sources, is still not exceptional. Foreign inquiry continues good reportedly.

August exports of sulfa drugs were 73,376 pounds, valued at $608,221. Of the total, the smallest quantity was sulfadiazine—1,345 pounds, valued at $5,963. The remainder was sulfathiazole — 101,674 pounds, valued at $44,515—and other drugs not specically classified (61,357 pounds, valued at $558,143). Shipments went all over the world.

Vitamin B_{12}—According to Commerce department statistics issued late last week, exports of B_{12} in August were valued at $104,612. Among the fourteen buyers, the two biggest were Denmark, which was down for $25,098 worth, and Bermuda, $24,528.

Domestic manufacturers posted lower prices September 13. All but cobalamin concentrates were effected. These, it's understood, have been dropped from the B_{12} product line by one large pharmaceutical firm.

Botanicals

Proving that interest in botanicals is very alive, Britain's 33-year-old Society of Herbalists, 10,000-strong, is pushing Parliament for recognition as a medical organization. Formerly known as the Society of Medical Herbalists, the group was forced to drop the adjective following enactment of the 1941 Pharmacy and Medicine Act.

While it fights to have this act rescinded, the society continues sales at its Bruton Street shop. Here you can buy celery tea, recommended for rheumatism and nerves; slippery elm for inflamed intestines; balm of gilead for coughs; buchu for bladder trouble; comfrey for bone troubles and chest ailments; and Irish moss or cherry bark jubes as a "useful household linament."

Agar—Still in extremely short supply, USP Kobe No. 1 strip is listed at $2.75 to $3.00 a pound. Little easing is expected. Shipping prices have continued to rise with last week's report, $2.60 a pound.

Aloes—Cape aloes are selling at 35c. to 40c. a pound with the powder, due to the additional costs involved in drying and milling, appreciably higher at 60c. to 65c. a pound. Curacao aloes are listed at 75c. a pound, with the powder 10c. higher

Chamamile Flowers—Roman chamomile is quoted today at $1.75 to $2 a pound, up from the $1.50-$1.75 range quoted previously. Advance follows a rise in replacement costs. Unchanged, Hungarian chamomile lists at 90c. to $1.

Colocynth Pulp—Interest is fair, supplies adequate upon recent receipt of new crop. Quote is 75c. a pound, unchanged.

Ergot—Reports of crop shortages have propelled prices to a high of $2 a pound. Previously quoted: $1.25. Interest is reported moderate.

Chemical Companies Snag

—Continued from page 5

Ordnance Ammunition Command, Joliet, Ill

One is $14,735,425 for continued production of rocket items including motors, propellants and explosives at Radford Arsenal, Va.

The other is $1,482,027 for varied items of propellants and explosives and maintenance in standby of the Sunflower Ordnance Works, Lawrence, Kan.

Liberty Powder Defense Corporation, East Alton, Ill., received two supplemental contracts totaling $3,399,739 awarded by the Ordnance Ammunition Command.

They are $2,162,889 for various propellants and explosives and maintenance in layaway of the Wabash River Ordnance Works, Newport, Ind., and the Indiana Arsenal, Carlestown, Ind., and $1,236,850 for varied propellants and explosives and maintenance in standby of the Badger Ordnance Works, Baraboo, Wis.

United States Rubber Company, New York, received a $1,555,791 supplemental contract for various items of propellants and explosives and maintenance in standby of the Joliet Arsenal.

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OPD Reports From Europe

Euromart Works on Additives Laws

—Continued from page 4

Memorial Institute of Columbus, Ohio, is rushing to completion a new laboratory building which will concentrate on making toxicological and other tests on food additives for European industrial clients of the institute.

The food and drug regulation harmonization effort in the Common Market staff is being handled by a group of inter-departmental committees since the problem involves at least three departments:

- The competition department, which will try to see that competition is maintained fairly by any new regulations.
- The internal market department, which is concerned with possible disruption of markets by changes in national regulations.
- The social affairs department.

Last January Euromart's inter-departmental committee for foods called a meeting of national officials in the field which formed a central group to work on all food problems. This central group appointed a number of sub-groups including one which is working particularly on food additives.

Food Colors First Under Study

Food coloring chemicals are the first additives under study by this group, and it is expected to submit proposals for a common regulation on food colorants by the end of the year to the central group.

One reason food additives were given priority is that international regulations already exist which may help ease the political problems of negotiating a common set of rules.

With food colorants as a precedent, assuming successful negotiation of common regulations, the food additives committee will later work on emulsifiers and anti-oxidants. No time schedule for regulations on these additives has been set. Another sub-group on control of imported foods and food materials is expected to hold its first meetings this fall.

In the drug field, the Common Market inter-departmental attack is just getting under way. A study meeting will be held before the end of this year with national government officials to start the work.

Various services of the Common Market secretariat now are making detailed studies of differing testing, patenting, certification and approval procedures for the six countries.

Rules Set by Council of Ministers

The Council of Ministers, which is the controlling executive body of the three European Communities, has laid down rules for the inter-departmental drug group requiring it to work in close collaboration with the national governments.

While the Brussels bureaucracy masses its data, national industry associations also have formed a committee to make central studies of the problems particularly in the drug field. According to spokesmen of the industry committee, its efforts aren't very much ahead of the Common Market's considerations. The word "study" covers the work so far.

The industry group, however, is maintaining close contact with a similar committee organized by the chemical and drug industries of the seven-nation European Free Trade Association. Several joint meetings have been held by the two committees.

It's no secret in the industry that Italian drug patent problems and Danish drug certification and approval difficulties are two of the major problems as the European industry looks toward an end of traditional trade barriers.

Kodak to Build DMT Facility

—Continued from page 3

erable damage to adjacent buildings. Some in the immediate area were shut down, largely as a precautionary measure.

However, by Wednesday (October 5), a major part of the Kingsport installation was back in operation. What's more, a quick assessment of the damage by Eastman officials indicated that there will be no major interruptions of chemical shipments out of the plant.

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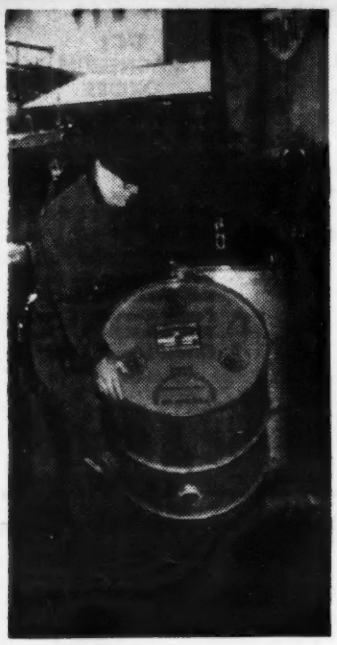

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Essential Oils, Aromatics

The two mints advanced considerably as did sandalwood; all the vanilla beans declined. Natural peppermint advanced 15 cents per pound, redistilled peppermint advanced 40 cents per pound, spearmint advanced 75 cents per pound and sandalwood advanced 50 cents per pound. Bourbon vanilla beans declined 50 cents per pound, Mexican cut vanilla beans declined 50 cents per pound and Mexican whole vanilla beans declined 50 cents per pound.

A cable from Cochin reports that the board of directors of the Indian Pepper and Spice Trade Association declared an emergency in pepper futures trading here and closed the market for two days because of the steadily falling prices.

Also, the board passed a resolution which fixes the floor price at 236 rupees per hundredweight and 206.25 rupees per 50 kilos for trading in October and December contracts, respectively.

The following statistics from published sources, might interest our perfume raw material suppliers.

• In France, practically every woman wears perfume.

• In America, 82 percent of women between 16 and 40 use some type of scent.

• In England, only about 20 percent of the women between 16 and 40 wear perfume regularly.

• Sixty-seven percent of the perfume buyers in England are men.

A woman entertainer in England has devised a beauty aid for polished fingernails. It is a fixative which is sprayed onto the nails immediately after they have been polished. The fixative dries them instantly and reportedly adds lustre.

The fixative also hardens the polished surface, keeps it from chipping and generally prolongs the life of the polish. Included among the ingredients of this new fixative is a health conditioner. Among the ingredients, however, there is no alcohol.

The following statistics, on Italy's citrus production, are from the Foreign Commerce Weekly which is published by the United States Department of Commerce in Washington, D.C.

Official estimate of the Italian lemon production remains at about 349,000 tons for 1959-60.

The estimate of orange production has been lowered to 712,700 tons from the 720,000 previously estimated.

Unofficial predictions are for lemon and orange production in 1960-61 to be at about the same levels. (This news was furnished to the Foreign Commerce Weekly by the United States Embassy in Rome.)

Price Trends

Advanced

Peppermint, natural, 15c. per lb.
redistilled, 40c. per lb.
Sandalwood, 50c. per lb.
Spearmint, 75c. per lb.

Reduced

Vanilla beans, Bourbon, 50c. per lb.
Mexican cuts, 50c. per lb.
wholes, 50c. per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Oct. 9, 1959
144.94	144.92	145.54	147.42

For Current Prices See Page 9

Essential Oils

Davana—From printed sources, we find a bit of interest stimulated in this rare oil. It is reported to be a brownish, viscous liquid of peculiar, and quite aromatic odor—somewhat like balsam.

Some descriptions say it is like chlorophyll, some say it suggests a spicy sandalwood, and some say it is reminiscent of labdanum.

At any rate, it is scarce and expensive. One essential oil company in the New York area quoted a price of $150 per pound and said that the oil is not always available.

Ocotea Cymbarum—Spot price remains at its previous quotation, 45c. per pound, but dealers say it is likely to go lower soon.

There is reported to be a large supply of material on spot. Demand is said to be slight.

One reason demand has been sloughing off is this: Several months ago, root beer producers decided to stop flavoring their beverages with safrole because of possible damage it could do to the human liver.

Safrole is found in ocotea cymbarum, so it stands to reason that with this important end-use practically abolished, the market for ocotea cymbarum would suffer.

Safrole, however, is one of the raw materials used in the manufacture of heliotropin. Since this is not taken internally, the liver-damage danger is nonexistent and safrole will continue to be used as a raw material for the manufacture of heliotropin.

Heliotropin is used as an ingredient in such fragrances as honeysuckle, lilac, sweet pea, lily-of-the-valley and heliotrope.

Palmarosa—The price continues around $4.45 per pound, according to trade sources.

To some traders, palmarosa oil is referred to as Turkish geranium oil.

This dates back to the time when the oil was shipped from Bombay to ports on the Red Sea and then transported, partly by land, to Constantinople and Bulgaria.

In Bulgaria, the oil used to be used to adulterate rose oil.

In most of the producing areas of India, authorities say, the palmarosa grass and the related gingergrass do not grow side by side.

In a few sections, however, the two varieties occur in neighboring places, which understandably tempts the native cutters and oil producers to collect the grass from both varieties.

Then they distill the two types of grass together. When this is done, the oil is of an inferior quality, but fortunately, according to reports, most of the growers take great care in the selection of their grasses so that only the pure palmarosa will be distilled. In most sections the palmarosa is not planted on specific tracts of land.

Rather, it grows wild over large areas. Distillation of the grass is carried out usually between October and December or January, depending upon the amount of rainfall and the general development of the grass.

Peppermint — The market advanced during the week.

Natural material rose from $4.25 per pound to $4.40 per pound. Redistilled material rose from $4.35 per pound to $4.75 per pound.

Sandalwood—The few dealers around New York who have supplies of sandalwood, are asking $23.50 per pound.

This is 50c. per pound more than the previous listing.

Shortage of material is said to be responsible for the ultra-firm market.

Prices were high when the August auctions took place in the Indian state of Mysore and it was assumed the market would weaken with the new material becoming available.

Considerably smaller quantities of wood than expected were auctioned off and the result was an even firmer market.

It is possible that there were small quantities of material available, but speculation is that the material is at source and that the government, which controls all the sandalwood, just isn't putting it on the market.

Dealers on spot are eagerly awaiting the December auctions and, they say, they hope the government of Mysore will see fit to offer larger quantities of material than it did in August.

This $23.50 per pound material is the

—Continued on page 64

Imports Detained at N. Y.

Week Ended September 23, 1960

Black pepper, 31 lots, 5,020 bags.
Caraway seed, 2 lots, 6 bags.
Cardamom seed, 5 crates.
Cassia, 7 lots, 678 bales.
Cloves, 6 bags.
Fennel seed, 43 bags.
Ginger root, 65 bags.
Mace, 3 lots, 39 cases.
Nutmegs, 6 lots, 527 bags.
Oregon leaves, 200 bags.
Poppy seed, 300 bags.

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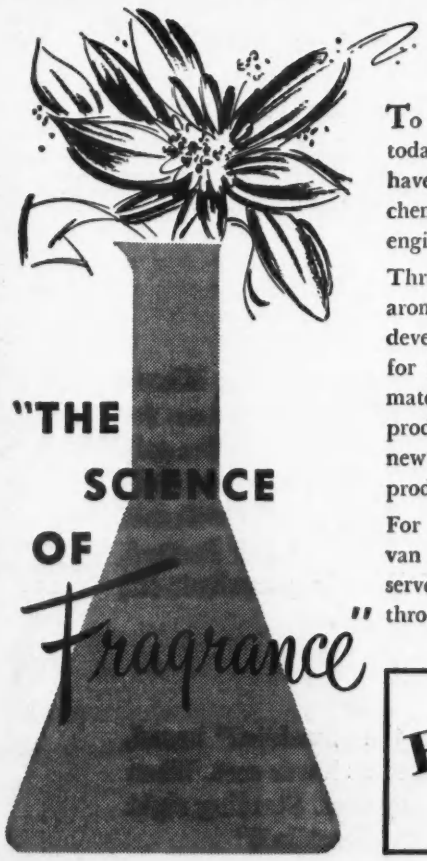

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Essential Oils

—*Continued from page 62*

East Indian material. West Indian material is much cheaper and is used in low-priced perfumes, cosmetics and soaps. It is used as a substitute for East Indian oil.

Due to its weaker odor, however, West Indian oil must be applied in very large doses so that the aroma is never the same as that produced by applying small amounts of East Indian oil.

Spearmint — Extreme tightness was noted in the market last week. From the previously quoted level, $4.75 per pound, spearmint oil has advanced to $5.50 per pound.

Seeds and Spices

Caraway—Old crop material is said to be feeling pressure from new crop material.

Cassia—It is reported that material from Saigon is available at reasonable prices. Imports of material from Batavia and Korintje are said to be light and subject to numerous delays enroute.

Dill Seed—The market is firming, it was said.

Pepper—Marked weakening was noted among both the black and the white peppers.

Malabar and Lampong black both were reduced from 51c. per pound to 47c. per pound. Muntok white was reduced from 78c. per pound to 73c. per pound.

Trade sources report that lowering prices encouraged some few people to buy, but due to the uncertainty of the situation, this little buying did not serve to reverse the downward trend.

It seems that many users are buying only enough material to satisfy their immediate needs.

Dealers take heart in the knowledge that the next few months will be the heaviest consuming season.

Spot stocks of Japanese chillies (red peppers) have been reduced in price. Reports are, however, that the new crop is from five to six weeks late. Material from Turkey is available at reasonable prices.

Pimento—Jamaican material is said to be scarce on spot.

Nutmegs—It is reported that material from the East Indies is scarce on spot. Material from the West Indies is unchanged.

Vanilla Beans—No definite word was available as of press time, but negotiations are being carried on in Madagascar which may result in the establishment of a floor price for vanilla beans.

This reports follows close on the heels of a previous report that the government would not set a floor price for the beans.

On spot material declined in price. Bourbon, Mexican cut and Mexican whole beans all were reduced 50 cents per pound.

DDT Buying Begins

—*Continued from page 5*

delivery to Ceylon, India, Indonesia and Vietnam between November 15 and December 15. It consists of the 75 percent wettable grade and is being purchased under invitations opened September 16.

Successful bidders were:

Diamond Alkali Company, Cleveland, Ohio, 300,000 pounds at 22.09 cents a pound, with a discount allowance of one-tenth of one percent for payment in thirty days.

Food Machinery & Chemical Corporation, 1.3 million pounds at 21 cents a pound.

Geigy Agricultural Chemicals Division of Geigy Chemical Corporation, Ardsley, N. Y., 480,000 pounds at 22.19 cents a pound.

Lebanon Chemical Corporation, Lebanon, Pa., 1 million pounds at 22.2 cents a pound with a discount of 2 percent for payment in twenty days.

Montrose Chemical Corporation of California, Los Angeles, 22.19 cents on 4.5 million pounds and 23.39 cents a pound on an additional 1,144,800 pounds.

Olin Mathieson Chemical Corporation, Baltimore, Md., 21.87 cents a pound on 2 million pounds.

FTC Curbs Vitamin Maker

—*Continued from page 4*

opinion of Commissioner William C. Kern, also requires the company to stop:

- Enforcing and threatening to enforce exclusive dealing requirements and other restrictive contractual-provisions.
- Making deceptive interpretations of a consent decree issued against it in 1951 by the US District Court for Southern California. The decree prohibits, restrains and limits the company's advertising practices.

William S. Casselberry and Lee S. Mytinger, the concern's president and secretary-treasurer, respectively, are also subject to the order.

Denying an appeal by the respondents, the commission's action upholds an initial decision of hearing examiner Abner E. Lipscomb.

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Coatings Materials

While sales of paint, varnish and lacquer scored healthy gains during August, the sales performance for the first eight months of 1960 is well behind that for the same period last year. Factory shipments totaled $167.1 million in August or 7 percent above July's figures and 5 percent above August, 1959. The gains in production were about 8 percent in August, according to reports from the Bureau of Census. Paint production in August was 59.4 million gallons.

The gains in total sales took place despite the upward revisions made in the figures for July. Last month July's sales were reported at $93.3 million. This month the revised figure is reported at $96.2 million.

The unofficial tally for total sales to date, as computed by OPD shows sales last year at $2.235 billion for the months January through August. This year OPD's unofficial tally finds sales for the same period at $831.4 million.

A new listing announced by one resin producer, became effective on October 1, include advance on modified phenolics, maleic resins, ester gums, and pure phenolics. The modified phenolics were boosted an average of about 2c. per pound. The highest increase within the various grades of the modified phenolics was 6c. per pound, the low being ¾c. per pound. Price increases on the maleic resins varied from a low of ¾c. per pound to a high of 2¾c. per pound. Ester gums were boosted by 5c. per pound, while the phenolics were raised 1c. per pound.

Escaping price changes on the producer's listing were: modified alkyds, urea coating resins and the melamine coating resins.

Zinc oxide demand is reported to be suffering from the combined effects of the decreased demand from the rubber industry and the seasonal decline in paint formulations using zinc oxide. Rubber and paint sources account for about 70 percent of the total zinc oxide production. Adding to the gloomy market picture is the strike now in progress at one of the largest producers plants.

A reduction in the price of a basic ingredient for special types of paints, di-pentaerythritol, was announced last week by one leading producer. The new price, which became effective with the announcement, is 34 cents per pound on the East Coast and in the Middle West, with the West Coast price at 35 cents per pound.

The reduction was made possible, according to company officials, through economies obtained by larger volume production of di-pentaerythritol at its new plant. The plant is located at Louisiana, Missouri, and went on stream about a year ago.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Oct. 9, 1959
103.13	103.13	103.16	103.05

For Current Prices see page 9

Prime Pigments

Aluminum Paste and Powders — Producers are generally pleased with the sales performance to date of the aluminum paste and powders. Demand for the paste and powders has been better than other forms of aluminum. This is particularly true in regard to aluminum pigment consumption in roofing paints. Supporting the traditional role of the paste and powders in roofing coatings, has been the types of aluminum paste and powders used in colored roofing coatings.

Producers report sales of the paste and powders should be ahead of the levels established last year. Price changes are felt to be unlikely at this time. Listings for paste and powder remain at 71 cents per pound for paste, lining, extra-fine, with powder, lining, extra-fine at $1.13 per pound.

Carbon Black—Production of carbon black in August was 0.6 percent above the output for August, 1959, according to reports from the Bureau of Mines. Shipments decreased 3.2 percent from August a year ago, while stocks increased 4 million pounds in August.

The cumulative total carbon black production for the months January through August was 1,422,270 pounds. Shipments during the same period was estimated by the Bureau of Mines at 1,349,734 pounds. For the same period last year, the output of all grades of carbon black was reported at 1,285,810 pounds. Shipments during the January-August months of 1959 were 1,329,948 pounds.

Zinc Oxide—The strike of one of the largest zinc producers remains unsettled. In progress for almost two months, trade sources feel the strike might well continue into January, 1961. So far, the struck producer has not had too much difficulty in meeting his customers' requirements. This is largely the result of the high level of stocks on hand at the beginning of the strike and the generally reduced demand for zinc products. There are some problems reported, however, in meeting demands for various grades of zinc oxide.

While about 20 percent of zinc oxide ends up in paint formulations, almost 50 percent is consumed in the manufacture of rubber products. In both cases producers find consumption falling off. Paint formulations that use zinc oxide normally tape off about this time of the year. Demand from that quarter is reported at its seasonal low. With automobile production just starting its new model runs, rubber output is correspondingly reduced.

Imports of zinc offer stiff competition to domestic producers. The threat posed by foreign processors becomes all the more serious as domestic producers' costs spiral upward. The nagging fear in the back of their minds prompts them to admit that they might be forced out of the market by the cheaper foreign material.

Lacquer Materials

Plasticizers—The tight situation existing in regard to the phthalate esters holds pretty much high and dry. Allocation figures of some of the larger plasticizer producers remain in the range 50 percent, unchanged from previous weeks. Yet to many in the trade this marks the low water mark in the availability of the phthalate esters. Steel should begin better than 50 percent operational capacity soon, and within a month or so naphthalene should begin flowing in pipelines. With naphthalene stocks at higher levels, phthalic supplies should be also on the rise.

Others in the trade do not see it quite this way. While a difference in degree often indicates a difference in kind, this quarter feels that the phthalate situation is basically unchanged in the last four months. They see the tight situation in the phthalate plasticizers holding well into the first quarter of 1961.

Miscellaneous

Animal Glue—The total production of animal glue for the month of August was

—*Continued on page 73*

Coatings Shipments Output: August

	Factory Shipments Dollars		Reported productions Gallons[1]	
	August	July	August	July
Trade sales	$102,400,000	*$96,200,000	32,300,000	*30,900,000
Industrial sales, total	64,700,000	60,200,000	27,100,000	*24,800,000
Paint and varnish	47,100,000	*44,500,000	19,800,000	*18,600,000
Lacquer	17,600,000	15,700,000	7,300,000	*6,200,000
Overall totals	167,100,000	*156,400,000	59,400,000	55,200,000

Totals sales—Jan.-Aug.: $831,400,000.*

[1] Estimated total production. About 2 percent of this total was imputed for companies that reported only dollar sales.
* Revised.

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Oils, Fats and Waxes

Edible vegetable oils were firmer last week reflecting the strength of soybean oil. The higher bean market resulted in a fractional advance in the oil, which in turn raised corn and cottonseed oils. Peanut oil was unchanged but remained steady because of tight stocks. Crude coconut oil closed firmer and slightly higher on reports of typhoon damage in the Philippines. Copra also was slightly higher.

Moderate improvement in the demand for olive oil on spot and for shipment strengthened the market, raising spot stocks 10 cents per gallon. Lard market was firmer and cash lard advanced 2/5 cent. Corn oil foots declined ¼ cent per pound and soybean foots, ⅛ cent, while cottonseed foots were unchanged.

While trading in tallow and greases was spotty, the market remained firm due to the lack of selling pressure. Offers continued light and were closely held.

Animal and vegetable fatty acids were finally reduced because of the continued light consuming demand and lower cost of basic materials. Oleic acid was reduced ¼ to ½ cent per pound; stearic acid, ½ cent; tallow acid, 1½ cents and hydrated tallow acid, ½ cent. Among vegetable acids, coconut dropped 1½ cents; corn, 1 cent; cottonseed, 1 cent; palm, 1 cent and soybean, 1 cent.

Among industrial oils, Brazilian castor oil was in steady demand for prompt delivery. Linseed oil also moved in good volume against contracts. Tung oil quiet and unsettled, with asking prices shadable for sizable quantities. Refined fish oils were in better demand for prompt needs. Crude menhaden oil was unchanged and steady.

Soybean meal was easy, off 50 cents per ton for early delivery. Linseed meal was quiet, with re-sellers shading prices 50 cents per ton. Cottonseed meal demand was spotty. Market was unchanged and steady.

Price Trends

Advanced

Copra, $2.50 per ton.
Corn oil, crude, ⅝c. per lb.
Refd., ⅝c. per lb.
Cottonseed oil, crude, ¼c. per lb.
Refd., ¼c. per lb
Lard, cash, 2/5c. per lb.
Olive oil, spot, 10c. per gal.
Soybean oil, crude, ⅛c. per lb.
Refd., ⅛c per lb.

Reduced

Cocoa butter, 1c. per lb.
Coconut oil fatty acid 1¼c. per lb.
Corn fatty acid, 1c. per lb.
Corn oil foots, ¼c. per lb.
Cottonseed fatty acids, 1c. per lb.
Oleic acid, ¼c per lb.
white, ½c. per lb.
Palm acid, 1c. per lb.
Soybean fatty acid, 1c. per lb.
foots, ⅛c. per lb.
Soybean meal, 50c. per ton
Stearic acid, ½c. per lb.
Tallow, fatty acid, 1½c. per lb.
hydrogenated, ½c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Oct. 9, 1959
107.76	107.76	109.87	114.78

For Current Prices see page 9

Vegetable Oils

Castor—Trading was fairly active for prompt delivery. Market ruled unchanged and steady. No. 1 Brazilian was maintained at 18½c. to 18¾c. per pound, tankcars, New York, nearby delivery, depending upon seller. Domestic grades were well held at unchanged levels.

The Foreign Agricultural Service reports that castor bean production in Bahia, Brazil, in 1960 is being estimated at between 77,000 and 88,000 short tons, or substantially more than last year's small outturn of less than 50,000 tons. Normally, Bahia produces about 40 percent of Brazil's annual production of castor beans. Oilseed crushers from Sao Paulo have been appearing in Bahia as large scale buyers, it was added, which seems to substantiate to some degree recent reports of damage from frost to the Sao Paulo and Parana crops.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	....	400,000
Previous week	....	1,976,000
Corresponding week, 1959	....	2,454,000
Total this year	3,353,450	68,340,000
Corresponding period, 1959	20,468,150	77,152,000

Coconut—Crude oil closed firmer and higher for November-December on reports of typhoon damage in the Philippines. Tankcars were sold at 12¼c. per pound, f.o.b. Pacific coast for October shipment. November-December was raised to 12⅛c. following sales of 12c. for November, same basis. The New York market was quiet and nominal at 13¾c., tankcars, New York and shadable.

US consumers are shifting from coconut oil to lower priced palm kernel oil, but the political and economic instability of the Congo may change the consumption pattern again to other lower price competitive fats and oils, according to the Department of Agriculture. Domestic disappearance of coconut oil was 356 million pounds during the first six months of this year, down from the 371 million pounds for the like period last year. However, disappearance of palm kernel oil was up about 50 percent from last year.

Corn—Crude was firm and higher because of limited supplies. Sales were made up to 13c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined oil was lifted to 16.70c., tankcars, New York basis.

Cottonseed — Futures market backed and filled closing steady and practically unchanged on the New York Produce Exchange last week. Trading was moderate.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, October 7, follow:

	Sales	High	Low	Close
		Cents per Pound		
Oct.	117	11.61	11.48	11.60S
Dec.	230	11.71	11.59	11.71S
March	267	11.80	11.68	11.79S
May	230	11.85	11.72	11.83S
July	70	11.87	11.73	11.86S
Sept.	3	11.74	11.69	11.73@11.74
Oct., '61	13	11.75	11.71	11.71@11.76

Total Sales and switches, 930 contracts.

Crude oil demand improved and market was firmer with the advance in soybean oil. Cash oil also was stronger and refined salad was raised to 12¾c per pound, tankcars, New York prompt delivery.

Trading in crude cottonseed oil was fairly active. Prices advanced about ¼c. Sales were reported at 9½c. per pound, tankcars in the Valley and 9½c. to 9¾c., southeast as to location and 9½c. Waco.

Linseed—Trading was quite active chiefly for fill-in needs. Demand for oil against contracts also continued in good volume. Prices were unchanged and steady. Raw oil was held at 12½c. per pound, tankcars, Minneapolis, for October-December delivery; 12.70c., January-March, same basis and 13.61c., f.o.b. New York.

Olive—Improved trading stiffened the local market. Quotations were lifted 10c. to $2.35 to $2.40 per gallon, drums, duty paid, exwarehouse according to quantity and quality. Demand broadened also for shipment with business reported from $52.50 to $54 per 100 kilos drums, f.o.b. Spanish ports for prompt shipment, as to quality.

Peanut—Market was quiet and steady.

Cottonseed Crush: August

Cottonseed received and crushed and production of cottonseed products during August and July, as compiled by the Bureau of Census, follows:

	August	July
Cottonseed		
	Tons	
Receipts at mills[1]	240,000	56,400
Crushed or used	139,800	142,700
Stocks at mills	205,000	104,800
Crude Oil		
	Pounds	
Produced	48,800,000	51,300,000
Stocks at mills	10,000,000	12,900,000
Cake and Meal		
	Tons	
Produced	68,600	70,000
Stocks at mills	157,700	189,900
Hulls		
	Tons	
Produced	34,000	34,300
Stocks at mills	25,500	28,700

[1] Net receipts for each state are derived from the quantity of seed crushed and the net changes in stocks.

Oils, Fats and Waxes

Crude was unchanged at 15½c. per pound, f.o.b. mills, prompt delivery. Refined oil was quoted at 18¾c., tankcars, New York.

Soybean—Stronger bean market stiffened oil. Crude advanced to 9¼c. per pound, tankcars, Decatur, unrestricted, for October-November delivery. Refined salad was firmer and ranged from 11¼c. to 11.30c. per pound, tankcars, New York, prompt delivery.

Tung—Buying interest was restricted to actual needs. Market was easy. Tankcars were unchanged and nominal at 22¼c. per pound, New York, for prompt delivery. Drums ranged from 24¼c. to 24½c. per pound, spot, depending upon quantity. Domestic oil was nominal at 22½c., tankcars, f.o.b. southern mills.

CCC sold 1,220,000 pounds of tung oil at 15.05 per pound, bulk f.o.b. Marrero, La., for export last week. Bids were received for more than 3 million pounds.

Soybean Crush: August

Soybeans received and crushed and production of soybean oil and meal during August and July, as compiled by Bureau of Census, follows:

Soybeans

	August	July
	Tons	
Receipts at mills	542,700	666,100
Crushed or used	962,000	941,300
Stocks at mills	597,000	1,016,300

Crude Oil

	Pounds	
Produced	358,500,000	350,000,000
Stocks at mills	74,400,000	135,200,000

Cake and Meal

	Tons[1]	
Produced	752,500	733,400
Stocks at mills	94,700	130,400

[1] Includes millfeed (hull meal).

Miscellaneous

Cocoa Butter—Market was quiet and lower. Spot stocks declined to 60c. to 65c. per pound depending upon quantity.

Copra—Prompt shipments were raised to $165 per ton, c.i.f. Pacific coast, following sales at $2.50 less.

Flaxseed—Early the past week the cash market was stronger moving up from $2.90 to $2.95 where it rested until a splurge of to-arrive sales at from $2.91 to $2.95 set bids back to $2.87, both spot and to-arrive. The harvest is nearly 100 percent completed. Outturn and quality are somewhat better than had been estimated.

Fats and Greases

Greases—This market remained steady, with offerings limited and closely held. Yellow grease ranged from 4¾c. to 5c. per pound, tankcars, delivered depending upon acid content. Choice white was firm at 7¼c. to 7⅜c., tankcars, same basis.

Lard—Market was firm and higher. Cash lard advanced to 9.40c. per pound, drums, Chicago.

Tallow—Market was firm, despite spotty demand for domestic needs. Offerings continued light and firmly held. Bleachable fancy was quoted at 5⅝c. per pound, tankcars, delivered with offers at ⅛c. higher. Guaranteed fancy was firmer at 5⅞c. to 6c.; prime, 5⅜c., special, 5⅛c. and No. 1, 4¾c. to 4⅞c., same basis. Export inquiry was light following recent booking of heavy tonnage at premiums. Guaranteed fancy was held at 6¼c. per pound, bulk, f.o.b. and 1c. more for drums, f.a.s.

Fatty Acids

Lower cost of basic materials, combined continued light consuming demand resulted in price reductions for animal and vegetable fatty acids from ¼c. to 1½c. per pound, last week. Coconut fatty was reduced 1½c. per pound; corn, 1c.; cottonseed, 1c.; palm, 1c.; soybean, 1c.; oleic single distilled, ¼c. and oleic white, ½c.;

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Oils, Fats and Waxes

stearic acid, ½c.; tallow, distilled, 1½c. and tallow, hydrogenated, ½c. per pound. Consumers demand has been confined to actual requirements.

Cake and Meal

Cottonseed Meal—Demand was still restricted to actual needs. Market ruled steady. Meal, 41 percent was unchanged at $57 per ton, sacked, Mississippi Valley area; Alabama, $58 and $59 to $60, Georgia-Carolina area.

Linseed Meal—Buying interest was meager in most areas. A 50c. per ton undercutting of the board rate by resellers was not a serious deterrent. Mixers and manufacturers are practicing inventory control until the market opens up. Extracted, 34 percent, bulk, in carlots, f.o.b. Minneapolis $50 a ton, first half of October, $51.50, last half of October, and $53.50, November. Old process, expeller, meal was unchanged $56.50, first half of October, $57.50, second half, and $59.50, November-December.

Soybean Meal—Unrestricted meal was lower at $49.50 a ton, Decatur, October. During the week soybeans edged up 1¼c. due to wet weather and scant marketings. The Galvin report as of October 1 estimated total production at 556 million bushels, 10 million below the government estimate of September 1. When the Galvin figures were announced some support came into meal, oil and soybean markets.

Waxes, Vegetable

Consumer demand was moderate, chiefly for immediate requirements. Carnauba wax remained steady on the spot, and for prompt shipment from Brazil while December forward shipments were about 2c. lower. No. 3 Ceara crude ranged from 71c. to 72c. per pound, on spot and Parnahyba, 1c. more. No. 1 Ceara yellow was available at 98c. to $1, per pound, spot as to quantity and Parnahyba, $1 to $1.02, same basis.

Crude beeswax continued in tight supply on spot and at primary sources. African crude was held at 54c. to 56c. per pound, prompt delivery. Brazilian and Chilean ranged from 56c. to 57c., same basis. Refined grades were unchanged and steady.

Lead, Zinc Probe Refused

—Continued from page 7

tons, about 7 percent higher than in the same period last year.

Employment in the lead and zinc mining industry after 1957 declined even more sharply than did mine output, the commission said. The total number of employees dropped from an average of 15,900 during January-September 1957 to 10,800 in the first nine months of 1958 and to 9,800 during the corresponding periods in 1959.

In the first six months of 1960, employment was three percent less than the average for the same period last year, according to the Bureau of Labor Statistics.

The market price of lead in the US declined from the annual average of 14.7 cents a pound in 1957 to 12.1 cents in 1958. It averaged 12.2 cents in 1959, the first full year under the import quotas. The price ranged from 11 to 13 cents during most of 1959, but has remained at 12 cents a pound since December 21, 1959.

In the case of zinc, the average market price in the US declined from 11.4 cents in 1957 to 10.3 cents in 1958 but returned to 11.4 cents in 1959. The price increased gradually from 10 cents on October 1, 1958, to 13 cents on January 11, 1960, and has remained at that level through the end of September, 1960.

MACHINERY ANYONE?

1—Sharples Super Centrifuge, Type M318-28-5-80A, motor driven, with dual rotary Pumps.
1—Roots-Connersville Rotary Positive Blower, Size 14x21, cap. 1690 c.f.m., 5# pressure.
2—Jeffrey 24x18", Type A2 Hammer Mills.
1—Kent 12x30" watercooled Roller Mill, m.d.
1—Duriron 2x2" Centrifugal Pump, 5 h.p. mtr.
1—Lydon 3 truck Atmos. Dryer.
1—#3 Banbury Mixer, 75 h.p. motor.

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Column: 24" x 22', 316 stain. steel.
Disintegrators: Rietz RD18-P and RD-12.
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Dryer: Bowen lab. spray, st. st.
Evaporator: Buflovak sgl. eff. st.st. 94 sq. ft.
Dryer: Porter 2 x 4' vac. drum, st. st.
Centrifugal: Tolhurst 26" rubber, 2-speed.
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Filter: Eimco, drum 16" x 12".
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MIXERS—Baker Perkins 100 gal. Jack. B. P. 15 HP—Masticator Mixer. Day Imperial 75 & 150 gal. Change Can Pony Mixers 8, 15, 40, 150 gal. Post Mixer 250 gals. Day Jumbo 700 gal. horiz. Mixer. Sprout-Waldron 10,000# horiz. Spiral Mixer. Blystone 3000# horiz. spiral Mixer. Day 1000# horiz. Dry ribbon Mixer. Dry Spiral Mixers 50 to 10,000#. Lancaster 6' dia. 25 HP & #1, 3 HP.
PUMPS—Vacuum 10 to 500 CFM. Gould 75 HP Centrifugal 250 PSI.
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Conical Dry Mixer 192 cu. ft. vol.; 125 cu. ft. opr. vol., with 15 H.P. Unibrake Motor.
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1—42" Sperry Filter 40-plates, 41-frames, hyd. closing, open del.
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1—Schutz-O'Neill Pulverizer 22", Style D.
1—Abbe Pebble Mill 5' x 22'.
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1—2 qt. Sigma Blade S.S. Mixer.
1—250 gal. Kettle, nickel jacket, 100#.
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1—430 S.S. Tank 3000 gal. vert. ⅜ plate, with 2 pc. cover.
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1—Bird 32" x 50", Solid Bowl, Continuous, 316 S.S.
3—Sharples PY14, PN14 Super-D-Canters 316 S.S.
1—Tolhurst 26" susp. Rubber Imperforate Basket.
2—Fletcher 48" Suspended 316 S.S. Perforated Basket.
2—Sharples #16, 304 S.S., 3 HP motor.

REACTORS — EVAPS — CONDS — TANKS

1—150 gal. 304 S.S. jacketed agitated Reactor.
3—Pfaudler 200 gal. glass lined jacketed Kettles.
1—650 gal. 304 S.S. Reactor with 100 sq. ft. Bayonet Heater.
1—1400 gal. Blaw-Knox, steel, jacketed, agitated Reactor.
1—700 sq. ft. Buflovak 304 SS forced circulation Evaporator.
1—550 sq. ft. Buflovak monel single effect Evaporator.
1—7500 gal. 316 S.S. Vert. Storage Tank, 7'x25', 50 psi.
1—500 gal. S.S. Mixing Tank with nickel coils.
1—4000 gal. Haveg Vert. Tank 8'x12'.
6—7500, 6000 and 2000 gal. Rubber Lined Tanks.
1—1500 gal. Stainless Pressure Tank, 5'x10', 90#.
2,000 gal. horiz. 304 S.S. tank 5' x 12'.
1—12,000 gal. horiz. steel Pressure Tank, 7'6"x36', 200 psi.
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1—Falls Industries 100 sq. ft. Karbate Condensor.
1—24" dia. x 35', 304 S.S. Bubble Cap Column.

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1—#5 Sweetland Filter 304 S.S. 120 sq. ft.
1—Oliver 6' dia. Horizontal Filter, 316 S.S.
1—Oliver 5' x 6' Steel Rotary Vacuum Precoat Filter.
1—U.S. 200 sq. ft. 304 S.S. Auto-Jet Filter.
1—Oliver 5'3"x8' Steel Rotary Vacuum, vaportite housing.
1—Eimco 18" x 12" 316 S.S. Rotary Vacuum Filter with pumps and piping.
1—Oliver 3' x 2' 347 S.S. Rotary Vacuum Filter.
1—Feinc 5'x6' Stainless Steel Rotary Vacuum Filter.
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1—Devine Vacuum Shelf with 19—59"x78" shelves.
1—Devine Vacuum Shelf with 10—40"x43" shelves.
2—Buflovak 42"x120", atmospheric double drum Dryers, complete.
2—Devine 4'x9', single drum, atmospheric.
1—Buflovak 3'x10' Rotary Vacuum Dryer.
1—Baker Perkins 5'6"x6' Rotary Vacuum Dryer.
2—Buflovak 5' x 30', 3' x 7'6" Rotary Vacuum Dryers 316 S.S.
2—Louisville Rotary Steam Tube 6'x25', 6'x50'.
2—Louisville 8'x50' Stainless Steel lined Rotary Dryers.
9—Rotary Dryers 34"x30', 4'x40', 6'x50', 6'x60', 7'x80', 8'x87'.
1—Traylor 30"x18' Stainless Steel Rotary Dryer.
2—Link Belt, 7'5"x25', 6'4"x24", S.S. Louvre Dryers.
2—Atmos. Tray Dryers, 16 shelves, 40"x24".
1—P&S 10' wide Apron Conveyor Dryer 48' long.
1—4' dia. 304 SS Spray Dryer.

MIXERS

1—Farrel-Birmingham "Midget" Banbury Mixer.
2—Day Imperial 150 gal. jktd. double arm.
1—Baker Perkins 100 gal., jacketed, double arm, 30 HP.
1—Baker Perkins #16TRM, 150 gal. jktd., Vac. 60 HP.
1—Baker Perkins 50 gal. jacketed, double arm.
1—Baker Perkins 10 gal. jacketed 304 S.S. double arm.
5—Day "Cincinnatus" double arm, 250 and 100 gal.
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1—Patterson 6' dia. Conical Blender 15 HP.
1—3' dia. Simpson Intensive Mixer.
1—Stokes 21K, 304 S.S. Granulating Mixer 82 gals.

MISCELLANEOUS

1—Farrel Birmingham, 8" x 16", 2 Roll Chrome Plated Mill.
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2—1SH, 1SI Mikro, Pulverizers, 3 HP.
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1—Raymond 10" vert Mill, 10 HP.
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Colton Automatic Tube Filler Model 14 AF; 35 per Minute.

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Bowen S/S Lab. Spray Dryer.

Louisville S/S Rotary Dryer, 30" x 28'; Indirect fired.

Louisville MONEL Rotary Steam Tube; 54"x35'.

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2 Stainless 400 gal. Reactors Jktd. Agtd. by Patterson and Struthers Wells.

Stainless Reactor, 2000 gal. Fully Jktd. Agitated.

Nickel Clad Reactor, 7'x11'6".

2 MONEL Reactors; 2800 gal. 6'8"x13'; ASME Jktd. & Intern.

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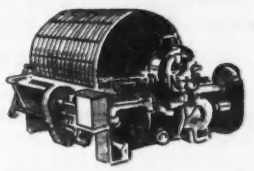

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Baker-Perkins Jktd. 5 gal. UNE-7, Dbl. Arm Mixer with pressure cover; 30 HP.

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Stainless Centrifugals from 30" to 60"; A.T.&M. Tolhurst, Fletcher, etc.

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1—Bonnet 6' x 52' rotary hot-air dryer, 5/16" shell, complete.
2—Sweetland #12, (24) 36" dia. leaves, 336 sq. ft.
6—Shriver 48" cast iron P. & F. filter presses, 50, 48 & 40 chambers, hydraulic closure, four-eye.
4—Davenport #2A dewatering presses, vari-drive, motor, etc.
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2—Quadruple effect evaporators, calandria type, 4050 sq. ft. cast iron bodies & copper tubes. With 1230 sq. ft. horiz. copper preheaters & 2450 sq. ft. finishing pans. Total 19,900 sq. ft. each. evaporator.
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10—Acme 96" dia. x 44' high copper beer still column, (20) perforated & (4) bubble cap trays.
5—Leader 96" dia. steel rectifying columns, 44' & 51' high.
2—9500 gal. horiz. steel cookers, ½" shell & dished heads, agit.

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AMERICA'S LARGEST STOCK DOUBLE ARM MIXERS

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1—J. H. Day #8 Cincin., 150 gal., sigma blade.
1—Baker-Perkins #15-UUMM, 100 gal. Dispersion blade, jkt., 100 HP XP drive, compression cover.
3—Baker-Perkins #15, 100 gal., sigma blade, jkt., 25 HP.
4—J. H. Day #30 Imperial, 75 gal., Dispersion blades.
2—J. H. Day #5 Cincin., 75 gal., sigma blade.
1—H. K. Porter 75 gal. Dbl.-worm mixer.
3—W. & P. #14, 50 gal., sigma blade.
1—J. H. Day #2 Cinc., 20 gal., sigma blade, jkt.

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T316 SS EQUIPMENT — ORANGE, TEXAS

5—800 sq. ft. T316 SS heat exchangers, ⅝" OD tubes.
1—800 sq. ft. T316 SS heat exchanger, 1" OD tubes.
1—Vulcan 110" dia. x 13' high, T316 SS bubble cap scrubber.
1—Vulcan 96" dia. x 37' high, T316 SS bubble column.
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5—Ing. Rand #5HC Ircamet pumps, 6" x 5".
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1—Struthers-Wells T316 SS 3500 gal. jktd. reactor, paddle agit.
2—Sharples #C-20 Super-D-Hydrators, T316 SS.
1—Sharples #16-P Super Centrif., T304 SS.
1—Struthers-Wells 630 sq. ft. Calandria Evaporator, T316 SS.
3—Worthington 160 ton steam-jet VACUUM refrigeration units.
2—American T316 SS blowers, 5660 cfm, 50 HP.
2—Buffalo T316 SS blowers, 2330 cfm, 60 HP.
2—Read 1800 cu. ft. weigh hoppers, T304 SS.
10—T316 SS tanks: 2750, 2500, 2300, 2250, 2100, 1900 gal.
30—T316 SS heat exchangers; 2000 sq. ft. to 54 sq. ft. sizes.

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Type 316 Stainless Steel Equipment

7—Alloy Fabricators Type 316 SS pressure vessels, 4500 gals., complete with agitators and drives, 45 psi.
2—Alloy Fabricators Type 316 SS, 4500 gals., jacketed reactors, complete with agitators and drives.
2—Alloy Fabricators Type 316 SS, 1000 gals., jacketed kettles, ⅜" material throughout.
12—Whitlock Type 316 SS pressure vessels with coils, 270 gals.
3—Type 347 SS pressure vessels with coils, 300 gals.
3—Type 316 SS mixing tanks, 6000 gals., complete with agitators and drives.
8—Acme Type 347 SS settling tanks with cone bottoms, 1000 gals.
1—2600 gals., Type 316 SS vertical vacuum receiver.
3—Vertical Type 316 SS activated carbon absorbers, 5'4" dia. x 16'.
1—Struthers Wells Type 316 SS, 500 lbs. pressure vessel, 75 gals., ASME code, National Board.
2—Project Fabricators Type 316 SS vacuum receivers, 160 gals.
2—Pfaudler 500 gals., glass lined jacketed kettles.
1—Pfaudler 20 gals., glass lined vacuum receiver.
1—Haveg 500 gals., vacuum receiver.
2—Aluminum horiz. 5000 gals., storage tanks.
5—Pfaudler horiz. glass lined storage tanks, 5000 gals.
1—Pfaudler vertical glass lined storage tank, 5000 gals.
2—Rubber lined tanks, 2500 gals., working pressure 45 lbs.
4—Rubber lined horiz. storage tanks,5000 gals.,working pressure 45 lbs.
16—Rubber lined vertical storage tanks, 4500 gals., working pressure 45 lbs.
4—Patterson Kelley SS condensers, 500 sq. ft.
7—Stainless steel condensers from 50 to 300 sq. ft.
4—Stainless steel packed columns, 18" x 15'.
2—Shriver 18" x 18" SS plate and frame filter presses, 10 chambers.
5—Shriver 42" x 42" wood plate and frame filter presses, complete with hydraulic closing device, 30 chambers.
7—Buflovak Type 316 SS jacketed rotary vacuum dryers, 5' x 30', complete with 25 HP explosion proof motors and drives.
3—Type 316 SS Ter-Meer continuous type centrifuges 4' dia. bowls complete with motors.
3—Readco SS jacketed horiz. blenders, complete with explosion proof motors and drives.
3—Mikro #3TH SS pulverizers, complete with 40 HP explosion proof motors.
1—Mikro SS bantam pulverizer, Model CF, complete with 3/4 HP explosion proof motor.
3—Gruendler SS, lab size, pulverizers.
2—Nash, Model HS-6, Hastelloy B vacuum pumps, with 25 HP motors.
3—Nash, Model HS-6, Type 316 SS vacuum pumps, with 25 HP motors.
3—Nash, Model TS-12, vacuum pumps, with motors.
1—Stokes Type 316 SS, jacketed, rotary vacuum dryer, 2' x 3'.
14—Copper jacketed mixing kettles, 3500 gals. each.
14—Copper jacketed rotary vacuum dryers, 8' x 10'.
5—American Type 316 SS blowers, Model MD, size 27".
6—200 gals., Type 316 SS vacuum receivers.
1—Fuller Type 316 SS, airveying system.
1—Aldrich Type 316 SS hydraulic triplex pump, size 2-3/4"x4", 500 psi.
1—Quimby Type 316 SS twin screw pump with 10 HP variable speed drive.
2—Powell Type 316 SS 10" hydraulically operated flanged gate valves.
2—Tyler Type 38 tandem SS Hum-Mer screens, size 42" x 9'-8".
50—Stainless steel and aluminum hoppers, all sizes.
100—Stainless steel centrifugal pumps, all makes and sizes.
3—200 gals., Type 316 SS jacketed kettles.
12—Type 316 SS Cyclone separators, 5'-2" x 10'-8" overall.
500 Tons of Type 316 SS pipe, fittings and valves, ranging from 2" to 6".
500 Tons of structural steel.
12—125 HP vertical agitator drives with Philadelphia drive, output speed 15.
2—150 HP vertical agitator drives with Philadelphia drive, output speed 15.
16—40 HP horizontal drives.

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for CHEMICAL AND ALLIED INDUSTRIES

1—Cleveland SS double cone blender, complete with drive and motor, 85 cu. ft.

1—Griscom Russell stainless steel heat exchanger, 900 sq. ft.

3—Davis Engineering Carpenter 20, heat exchangers, 120 sq. ft., NEW.

20—Davis Engineering SS heat exchangers, 102, 119, 136 and 166 sq. ft., NEW.

3—Badger type 316 SS heat exchangers, 500 and 600 sq. ft.

1—Downington type 316 SS heat exchanger, 750 sq. ft.

1—Cleveland double ribbon horizontal blender, jacketed, 65 cu. ft.

1—Baker Perkins Size 16 TRM, 150 gal. jacketed double arm sigma blade mixer with vacuum cover.

10—Robinson SS double ribbon blenders, 255 cu. ft.

1—Banbury #1 mixer, chrome plated rotor, with 50 HP motor.

1—Williams "Comet" 4 roll mill, complete.

1—Tolhurst SS 26" center slung centrifuge, with perforate basket.

8—Western States 40" type 316 SS suspended type centrifuges, complete with perforated baskets, plows and 40 HP motors. Year built 1953.

4—Tolhurst 40" center slung rubber covered centrifuges, with perforate baskets and motors.

4—Tolhurst 30" center slung rubber covered centrifuges, with perforate baskets.

1—AT&M SS 40" suspended type centrifuge, complete with plow and perforate basket.

1—AT&M SS 26" suspended type centrifuge, complete with plow and motor, with perforate basket.

3—Pfaudler type 316 SS jacketed reactors, with impeller type agitators, baffles and drives, 3, 5 and 50 gal.

1—Pfaudler glass lined 1000 gal., vertical storage tank.

2—Struthers Wells type 316 SS 2000 gal. jacketed reactors, complete with agitators and drives.

1—Sharples Super-D-Canter, PN-14.

2—Stainless steel open top kettles, 2500 gals.

1—Buflovak SS rotary vacuum dryer, 3'x15'.

1—Buflovak steel jacketed rotary vacuum dryer, 3'x15'.

1—Stokes steel jacketed rotary vacuum dryer, 5'x30'.

2—Hersey SS rotary dryers, 18"x 11'6" and 3'x16'.

1—Niagara SS filter Model 510-28.

1—Oliver SS rotary vacuum precoat filter, 3'x2'.

1—Oliver SS rotary vacuum pressure precoat filter, 5'3"x8'.

1—Oliver SS rotary vacuum precoat filter, 3'x4'.

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1—Stainless steel packed column, 18"x9'.

1—Pfaudler glass lined jacketed reactor, 100 gal., complete with impeller type agitator and drive.

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Kettle—20 Gal. Lead Lined.
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Trade Name Chemicals

—Continued from page 49

materials which are oxidized by chlorous acid. Aldehydes, lactic and tartaric acids and their esters are examples and effective pH range is 5 to 7.

A number of additives are usually incorporated in the bleaching bath to contribute to improvements in the overall operation. For example, surface active agents assist in fiber penetration, buffers keep the bleaching action of the bath constant and sequestrants reduce the concentration of metal ions in the bath.

Olin Mathieson markets **"Textone,"** sodium chlorite, for use in bleaching, oxidizing and stripping in the textile industry. The major applications of the product utilize its abilities to oxidize impurities and dyes while keeping fiber degradation to a minimum. It is adaptable to both batch and continuous operations, an important aspect due to the increased interest in continuous processing of textiles.

"Aktivin" is Heyden Newport's trade name for a technical grade of chloramine T which the company markets for use primarily as a desizing agent. The product converts water insoluble starch to soluble products which are easily removed by washing after the weaving operation is completed. However, **"Aktivin"** has bleaching action. Oxygen release is slow and controlled which prevents the fabric from being "tenderized" (weakened) by the action of the bleaching agent, Heyden reports.

Verona Dyestuffs manufactures **"Sodium Chlorite 80"** for industrial use in the bleaching of man-made fibers, primarily acrylics and polyamides. The product is supplied as an 80 percent active dry powder in 110-lb. containers. A borate is recommended for use as a buffing agent with the compound to inhibit corrosion of stainless steel equipment in sodium chlorite or chlorine dioxide liquors.

Statement of the ownership management, circulation, etc., required by the Acts of Congress of August 24, 1912, and March 3, 1933, and July 2, 1946, and June 11, 1960, of Oil, Paint and Drug Reporter, published weekly except semi-weekly the last week in February and the last week in August at New York, N. Y. for October 1, 1960.

The names and addresses of the publisher, editor, managing editor, and business manager are:—Publisher, Schnell Publishing Company, Inc., 30 Church street, New York, 7; editor, William S. Auchincloss, 30 Church street, New York, 7; managing editor, Arthur R. Kavaler, 30 Church street, New York, 7; business manager, William S. Auchincloss, 30 Church street, New York, 7. That the owner is Schnell Publishing Company, Inc., 30 Church street, New York, 7. Stockholders holding 1 percent or more, James Stuart Auchincloss, Short Hills, N. J., Jean Schnell Auchincloss, Short Hills, N. J., Sara Jane Auchincloss, Short Hills, N. J. and Kathryn A. Porter, Far Hills, N. J. That the known bondholders, mortgagees and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities are:—Not any. Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees hold stock and securities in a capacity other than that of a bona fide owner.

That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the twelve months preceding the date shown above was 11,143.

(Signed) William S. Auchincloss, Business Manager.

Sworn to and subscribed before me this 20th day of September, 1960.

(Signed) Eleanor H. Buxbaum, Notary Public.

(My commission expires March 30, 1961.)

Obituaries

Dr. Hermann Irving Schlesinger

Dr. Hermann Irving Schlesinger, internationally known rocket fuel expert, died October 3 in Chicago. He was seventy-seven years old.

A recognized leader in jet and rocket fuel research, Dr. Schlesinger worked with the Atomic Energy Commission, the Office of Naval Research and other government agencies, pioneering more efficient methods to produce boron hydrides for use as missile propellants.

Martin M. Burger, research chemist and science teacher, died October 3 in Brooklyn. He was fifty-one years old.

John A. Ritter, former official of Sun Oil Company's southwest division, died October 1. He was seventy-three years old. Mr. Ritter retired in 1954 as operating superintendent for the southwest division after thirty-one years with Sun.

Bids Wanted

Acetone, Spec. JAN-A-489 dated Aug. 13, 1947, 160,000 lbs., Bid IFB 174-33-61, Oct. 12. Naval Propellant Plant, Indianhead, Md.

Agricultural Chemicals, term contract, indefinite quantity during the period Jan. 1, 1961, through Dec. 31, 1961. Bid IFB KC-89273, Oct. 17. General Services Administration, Region 6, Business Service Center, 2306 East Bannister Road, Kansas City 31, Mo.

Disinfectant, germicidal and fungicidal concentrate, 2,740 bots., Bid RFP 7812Q, bid date not furnished. Military Medical Supply Agency, 29th St. and 3rd Ave., Brooklyn 32, N.Y.

DDT, 200,000 kgs.; hexachloride benzene, 50,000 kgs., estimated value $88,000, bids invited until Oct. 22 by the State Procurement Service, 50 Socratus Street, Athens, Greece.

Ergomalste, 1.5 million tablets, 0.5 mgm., in bots., of 500 each. Bids invited until Dec. 13 by the Ministry of Health, P.O. Box 500, Colombo, Ceylon.

Enamel, rust inhibiting, Spec. Fed. TT-E-485D, type iv, (QPL) 20,400 gals., Bid IFB 155-921-61B, Nov. 2. An additional quantity of 33,300 gals. is being reserved for small business under a partial determination. **Enamel,** 35,670 gals., Spec. Fed. TT-E-485D, type II, Bid IFB 155-916-B, Nov. 2. An additional quantity of 16,130 gals. is being set aside for small business. **Enamel,** lusterless, Spec. MIL-E-10687B (QPL) 5,300 gals., Bid IFB 155-918-61B, Nov. 2. General Stores Supply Office, 700 Robbins Ave., Philadelphia 11, Pa.

Paint, interior and latex base, term contract for the period from the date of acceptance through Nov. 30, 1961, in accord with Fed. Specs. TT-P-506C and TT-P-29, indefinite quantity. Bid IFB CH-FT-282, October 25. General Services Administration, Region 5, Business Service, 575 US Courthouse, 219 S. Clark St. Chicago 4, Ill.

Sulfur, 12,000 tons, bid deadline Oct. 21. Bids invited by the Agricultural Bank of Greece, 23 Venizelos St., Athens.

Sulfur of Copper, 7,000 metric tons, crystalline, Oct. 25. Bids invited by the Agricultural Bank of Greece, 23 Venizelos St., Athens. Bidding instructions, specifications and other pertinent data are available for review on loan from the Trade Development Commission, US Department of Commerce, Washington 25, D.C.

Sulfur Dioxide Makers

—Continued from page 5

Cost of construction is reported at $750,000.

Shipped commercially, sulfur dioxide is a highly purified, water-white liquid, used in a variety of end products, including foods (as a preservative), antibiotics and paper pulp.

Availability of the material has been lagging behind demand for some time, Virginia Smelting reports. With its expanded facilities, the company hopes to encourage investigation of new applications as well as alleviating the present shortage.

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Advertisers' Index

Acme Hardesty Co. ... 67
Allied Chemical Corporation, General Chemical Division ... 35
Allied Chemical Corporation, National Aniline Division ... 11
Allied Chemical Corporation—Plastics Division ... 52
American Cyanamid Company, Fine Chemicals Department ... 15
American Cyanamid Company, Process Chemicals Department ... 49
American Firstoline Corporation ... 46
American Lignite Products Co. ... 67
Argueso, M., & Co., Inc. ... 67
Armour Industrial Chemical Company ... 23
Armour Pharmaceutical Company ... 60
Ashcraft-Wilkinson Co. ... 48

Baker, J. T., Chemical Co. ... 1, 2
Barcan, Irving, Company ... 71
Barclay Chemical Company, Inc. ... 72
Becco Chemical Division, Food Machinery & Chemical Corp. ... 43, 46
Berkshire Chemicals, Inc. ... 44
Better Finishes & Coatings, Inc. ... 42
Bios Laboratories, Inc. ... 60
Blackman, Stanley, Labs, Inc. ... 58
Blockson Chemical Company ... 42
Bower, Henry, Chemical Mfg. Co. ... 46
Bowman, Charles, & Co. ... 58
Brill Equipment Company ... 69
Brode Corporation, The ... 67

Celanese Corporation of America, Chemical Division ... 21, 74
Chemical Manufacturing Co., Inc. ... 45
Chemical & Process Machinery Corp. ... 71
Chemical Service Corp. ... 72
Chemical Solvents, Inc. ... 74
Chemsol, Inc. ... 72
Columbia Southern Chemical Corporation ... 42
Commercial Solvents Corporation ... 1
Coupe, Robert A. ... 44
Cowles Chemical Company ... 33
Croda, Incorporated ... 67

Darlington Chemicals, Inc. ... 61
David Weisz Co. ... 73
Davies Nitrate Co. Incorporated ... 47
Dickinson, J. Q., & Co. ... 61
Diehl, Wm., & Co. ... 67
Distillation Products Industries, Div. of Eastman Kodak Company ... 41
Dow Corning Corporation ... 32
Drum Parts, Inc. ... 46
DuPont de Nemours, E. I., & Co., (Inc.) ... 53, 54
Duval Sulphur & Potash Co. ... 48

Eastman Chemical Products, Inc. ... 20
Emery Industries, Inc. ... 66
Equipment Clearing House, Inc. ... 71
Esso Standard, Division of Humble Oil & Refining Company ... 34

Fairmount Chemical Co., Inc. ... 61
Felton Chemical Company, Inc. ... 64
First Machinery Corp. ... 69
Fisher Chemical Co., Inc. ... 74
Florasynth Laboratories, Inc. ... 62
Fritzsche Brothers, Inc. ... 62

Gelb, R., & Sons, Inc. ... 70, 71
Greeff, R. W., & Co. ... 37
Gulf Oil Corporation ... 51

Halby Chemical Co., Inc. ... 44
Harchem Division, Wallace & Tiernan, Inc. ... 67
Harshaw Chemical Co., Inc. ... 16, 58
Heat & Power Co., Inc. ... 68
Heico, Inc. ... 46
Henry, J. F., Chemical Co., Inc. ... 47
Heyden Chemical Division, Heyden Newport Chemical Corporation ... 26
Hoffmann-La Roche, Inc. ... 59
Hooker Chemical Corporation ... 43
Hutchinson, D. W., & Co., Inc. ... 62

Industrial Molasses Corporation ... 66
Inland Steel Container Company ... 55
International Petrosolvents, Inc. ... 50

Jefferson Chemical Company, Inc. ... 51, 55, 64

Laplace, L. J., & M. ... 44
Lawler Company ... 71
Lebanon Chemical Co. ... 48
Lemke, B. L., & Co., Inc. ... 60
Lever Brothers Company ... 50
Loeb, H., & Son ... 68
Loeb Equipment Suply Co. ... 68
Lucidol Division, Wallace & Tiernan, Incorporated ... 51
Lueders, George, & Co., Incorporated ... 64

Machinecraft Corp. ... 71, 72
Machinery & Equipment Company ... 68, 71, 72
Machinery & Equipment Co., The ... 71
Magnus, Mabee & Reynard, Inc. ... 62
Meer Corporation ... 61
Merck & Co., Inc. ... 45
Michigan Chemical Corporation ... 13
Miles Chemical Company Division, Miles Laboratories, Inc. ... 19
Minute Maid Corporation, Citrus Products Division ... 63
Mississippi Lime Company ... 45
Montrose Chemical Company ... 37
Morton Chemical Company ... 8
Mutual Citrus Products Company ... 25

Neville Chemical Company ... 74
Norda Essential Oil & Chemical Company, Inc. ... 12

Old Dutch Mustard Co., Inc. ... 64
Olin Mathieson Chemical Corporation Chemical Division ... 18
Oronite Chemical Company ... 49
Osborn, C. J., Co. ... 65

Page, Charles, & Co., Inc. ... 53
Pahl, S. L. ... 61
Pan American Sulphur Company ... 47
Penick, S. B., & Company ... 62
Pennsalt Chemicals Corporation, Industrial Division ... 1
Perry Equipment Corp. ... 70
Pfaltz & Bauer, Inc. ... 61
Pfister Chemical Works, Inc. ... 55
Pfizer, Chas., & Co., Inc. ... 22
Phelps Dodge Refining Corporation ... 47
Philipp Brothers Chemicals, Inc. ... 43
Pittsburgh Chemical Company ... 53
Plastics Division, Allied Chemical Corporation ... 52
Polak's Frutal Works, Inc. (PFW) ... 64
Prior Chemical Corporation ... 1
Process Plants Service, Inc. ... 68
Procter & Gamble Co. ... 50
Publicker Industries, Inc. ... 10

Quaker State Oil Refining Corp. ... 67

Raney Catalyst Co. ... 50
Read, Chas. L., & Co., Inc. ... 65
Reichhold Chemicals, Inc. ... 27
Reilly Tar & Chemical Corporation ... 6
Republic Chemical Corporation ... 44
Republic Steel Corporation ... 48
Riches-Nelson, Inc. ... 74
Richter, Gedeon Pharmaceutical Products, Inc. ... 61
Robeco Chemicals, Inc. ... 74
Ross, F. H., & Co. ... 44

Sergeant, E. M., Pulp & Chemical Co., Inc. ... 74
Shamrock Chemicals Corporation ... 67
Shell Oil Company ... 57
Smith, Werner G., Inc. ... 67
Sonneborn Chemical & Refining Corporation ... 31
Standard Collapsible Tube Co. ... 65
Stauffer Chemical Company ... 48
Stein Equipment Co. ... 68
Sunkist Growers, Inc. ... 24
Synthetic Products Company ... 51

Tennant Chemical Division, Tennant Development Corporation ... 51
Tennessee Corporation ... 17

Union Carbide Chemicals Company, Division of Union Carbide Corporation ... 1
U. S. Borax & Chemical Corporation ... 1
U. S. Industrial Chemical Company, Division of National Distillers & Chemical Corporation ... 29, 30
U. S. Steel Corp. ... 54
United Ultramarine & Chemical Company, Inc. ... 65
Upjohn Company, The ... 60

van Ameringen-Haebler, Division of International Flavor & Fragrances, Inc. ... 64
Verona Aromatics, A Division of Verona-Pharma Chemical Corp. ... 65

Wallerstein Company, Inc. ... 38, 39
Welch, Holme & Clark Company, Inc. ... 67
Wolf, Bill, Inc. ... 68
Wood Ridge Chemical Corporation ... 61
Wyandotte Chemicals Corporation ... 50

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SAN FRANCISCO (SUtter 1-5568) — Robert W. Walker Company, 57 Post Street, San Francisco

Coatings Materials

—*Continued from page 65*

8,334,000 pounds, reports the Bureau of Census. Output during the previous month was 6,307,000 pounds. For August of last year, production was reported at 8,218,000 pounds. During August, 1960, the production of animal glue was about evenly divided between hide glue and bone glue.

Shipments of animal glue were made at the rate of 8,235,000 pounds during August. While this is above the amount shipped during the previous month, it does not compare to the higher rate shipped during August of last year. During July 6,019,000 pounds were shipped. For August of last year, shipments totaled 11,040,000 pounds.

Stocks at the end of August were estimated by the Bureau of Mines ot 37,244,000 pounds, roughly unchanged from the previous month's total. The amount of animal glue on hand at the end of August, 1959, was reported at 28,277,000 pounds.

Casein—The easier trend that has characterized the casein market over the past month showed no signs of improving on the basis of reports from the trade. Quotations are reported to be holding in the same range as in the previous week. Demand was reported to be light.

Increased inquiry was reported on the part of consumers for November, December and January. Consumers are tending to draw on their existing inventories, which were frequently low. An occasional offering of French casein drew little response from consumers. Practically no offerings of Australian were reported. Stocks of New Zealand are felt to be adequate for most needs. Offerings of Argentine and Polish were said to be liberal. Interest generally was limited.

Naval Stores

August production of gum naval stores totaled 15,580 barrels of turpentine and 46,400 drums of rosin, according to the Crop Reporting Board. Production during the first five months of the crop year was 8 percent above the same period last year.

Sulfate turpentine production at 26,500 barrels, was 2,430 barrels larger than the 'vacation' level of a month ago and more than offset the decline in steam distilled output, with total wood turpentine production at 38,450 barrels, compared with the 37,740 barrels reported for July.

Steam distilled rosin production at 99,310 drums and tall oil, rosin at 35,560 drums. Gum terpentine and rosin stocks showed seasonal increases from a month earlier. Wood turpentine on hand August 31 was down 13,530 barrels from a month earlier with steam distilled and tall oil rosin stocks down 1,400 and 340 barrels, respectively.

Pine Gum—The average commercial crude gum price per standard barrel paid for the week ended Sept. 24, was $45.70. For the previous week the price paid per standard barrel was $45.40, compared to the $29.30 for the same week a year ago. Loan price for the week ended Sept. 30 was $25.90.

The volume of gum deliveries for the week ending Sept. 30 totaled 17,200 including 90 loan. The previous week saw 200 more deliveries than last week's total. A year ago, 15,268 deliveries were reported, including 228 loan.

The average barrel content of turpentine was 10.44 gallons with rosin at 299.2 pounds. Gulf grading was as follows: 48 WW; 21 WG; 12 N; and 19 M. The weekly weighted averages for gum were N, $16.60, with no averages reported for WW, WG, M, or K. The weekly weighted average for turpentine was 45 9/10 cents per gallon.

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Sept. 30	Mon. Oct. 3	Tues. Oct. 4	Wed. Oct. 5	Thurs. Oct. 6
Drums—					
G	$16.50[1]		...	...	...
K	...	$16.50	...	...	...
M	...	16.50	...	...	...
N	$16.50	...	...	...	...
Bags—					
N	16.50	...	...	...	...
Tankcars (for week ended Oct. 7)—					
K or better, $15.50					
Sales, USDA	457*	4‡	...	2‡	...

New York

(Per 100 lbs., c.l., Friday)

K-M, $17.75; N, $17.85; WG, $18.10; WW, $18.25

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	.46	.46½	...	...	...
Sales	8,000¶	4,000¶	...	...	...

* Drums equivalent. ‡ Carlots. ¶ Gallons. [1] Or better.

SAACI to Study Sales Chart

—*Continued from page 7*

ment, product development and market research.

• Multi-level selling and relationships.

Keynoting the meeting will be J. K. Marshall, of Union Carbide Chemicals Company. Frank J. Lovejoy, retired sales manager of Socony Mobile Products Company, will give a luncheon talk.

Panelists include G. Scott Shaw, Shell Chemical Company; T. H. Risch, Heyden Newport Chemical Corporation; Walter M. Burgess, McKesson & Robbins, Inc.; Charles Haffey, Chas. Pfizer & Co.; L. William Sessions, Monsanto Chemical Company; Clarence H. Sigler, Naugatuck Chemical Division, US Rubber Company; Philip A. Burghart, Houdry Process Corporation; James P. Barry, Allied Chemical Corporation; Gordon E. Cole, Air Reduction Chemical Company; George C. Sweet, Reichhold Chemicals, Inc.; J. E. Newman, American Mineral Spirits Company and Samuel E. Moody, Socony Mobil Oil Company.

Business Definitely Spotty: Purchasing Agents

—*Continued from page 4*

an important effect on our business prosperity, this month we sought to determine if our members' inventories of purchased materials were now at ideal levels or whether they planned future additions or reductions.

It is quite evident that further reductions will be made, for 38 percent of our members said their inventories were still higher than they would like to see them. Only 4 percent planned to add to their stocks, while 58 percent said they had now reached the ideal level.

Commodity Prices

There is no noticeable change from last month. Some overseas situations are causing problems in commodities such as sugar and rubber. However, even here, there is no vigorous upward price movement. A well-planned purchasing program will still produce good buys in most items.

Unless business, generally, gets a stimulating "shot in the arm," the consensus seems to be that there is presently little basis for any immediate price strengthening. As for August, 11 percent again say prices are up somewhat. The big majority, 83 percent, report no change, and 6 percent say they are paying less.

Purchased Material Inventories

Purchasing executives continue to reduce their purchased material inventories. Keen price competition and the ready availability of practically all materials made it undesirable to add to stocks on hand, even though the fall months have traditionally shown higher levels.

However, many of our members point out that their inventories are now approaching satisfactory levels. For September, 13 percent tell of higher inventories (the same as August), 37 percent say their inventories are lower, and 50 percent report them the same.

Employment

After an encouraging upsurge in employment two months ago, we saw a slight reversal of this trend in last month's report and now another decline is reported for September. While automobile production for September was higher than for August, robust finished goods inventories in many other industries have temporarily contained any desire to add people to payrolls.

Many of our members predict, however, that their October employment figures will show improvement. Only 10 percent indicate that their September employment is higher than August, while 28 percent say it is lower. The bulk, 62 percent show no change from August.

Buying Policy

It would seem that the amount of time ahead for which purchasing executives are willing to commit could not be shortened much more. But, again this month, a further trend toward hand-to-mouth buying is apparent. This movement is much more discernable when the statistics for the past twelve months are plotted.

	Percent Reporting				
September	Hand to Mouth	30 Days	60 Days	90 Days	6 Mos. to 1 Yr.
Production Materials	11	40	30	15	4
MRO Supplies	30	44	21	4	1
Capital Expenditures	15	6	12	24	43
August					
Production Materials	10	40	34	11	5
MRO Supplies	29	47	18	4	2
Capitol Expenditures	12	7	9	25	47

Specific Commodity Changes

International situations, plus poor profit positions in some commodities and industries, are inching a few prices upward.

On the *up* side are: raw sugar, fuel oil, rubber, burlap bags, phenol and phenolic resins, V-belts, and chain and sprocket drives.

On the *down* side are: scrap steel and some stainless steels.

In *short* supply: Phthalate esters and phthalic anhydride.

Sherwin-Williams Develops New Phthalocyanine Blue

Sherwin-Williams Company has developed a new flushed phthalocyanine blue to meet paint industry needs for a red shade blue, a flocculation-resistant blue standard and a flushing in odorless general purpose alkyd varnish.

The pigment, designated as "FL-11-378," has a very bright red shade, somewhat cleaner and slightly redder than the standard dry color, the Cleveland, Ohio, company reports.

CMRA of So. Calif. to Meet

Chemical Market Research Association of Southern California has booked Aaron K. Stull, of Fibreboard Paper Products Corporation, San Francisco, as featured speaker at its this Thursday (October 13) meeting at the Rodger Young Auditorium in Los Angeles. Mr. Stull's topic will be "Do's and Don'ts of Interviewing a Purchasing Agent."

Ion Exchange Installation

—*Continued from page 7*

lieved to be the largest of its kind in the world.

The contract that Michigan Chemical had to produce yttrium oxide for the Atomic Energy Commission was terminated in mid-1959 and the manufacturing facility was placed on a standby basis. Recently it was declared surplus by AEC and was secured by Michigan Chemical in an open bidding sale on September 19.

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